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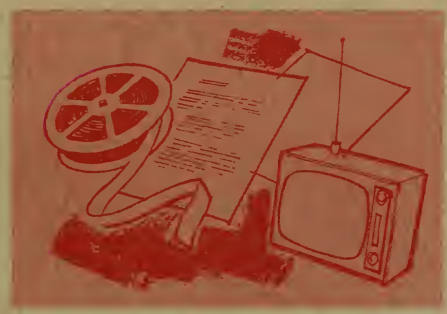
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FCS BULLETIN 1

FARMER COOPERATIVES

in the United States



THE Farmer Cooperative Service conducts research studies and service activities of assistance to farmers in connection with cooperatives engaged in marketing farm products, purchasing farm supplies, and supplying business services. The work of the Service relates to problems of management, organization, policies, financing, merchandising, product quality, costs, efficiency, and membership.

The Service publishes the results of such studies; confers and advises with officials of farmer cooperatives; and works with educational agencies, cooperatives, and others in the dissemination of information relating to cooperative principles and practices.

Joseph G. Knapp
Administrator
Farmer Cooperative Service
U.S. Department of Agriculture

FCS Bulletin 1
(Revised—1965)

Foreword

THIS bulletin is designed to provide a comprehensive review of the many ways farmers use cooperatives to help solve their economic problems—the complex problems inherent in marketing their products, buying their farm supplies, and providing many other essential business services — and improve their well-being.

The first publication of this scope and type was issued by the U.S. Department of Agriculture in 1917. Since then it has been revised a number of times. Latest revision was in 1955 as Bulletin 1 of Farmer Cooperative Service.

It portrayed the growing strength and expanding use farmers were making of their cooperatives and discussed the principles, practices, and problems of such farmer organizations.

The present revision emphasizes important developments since that time and to a considerable degree retains the general organizational features of the 1955 edition.

Farm credit cooperatives are not discussed in detail in this bulletin

as publications of the Farm Credit Administration describe them fully.

The Cooperative Marketing Act, passed by the Congress in 1926, directs the Department of Agriculture to acquire and disseminate information useful “in the development and practice of cooperation,” and “to promote the knowledge of cooperative principles and practices and to cooperate in promoting such knowledge with educational and marketing agencies, and cooperative associations.”

This bulletin is issued primarily for educational workers in schools and colleges and for others who need general information on farmer cooperatives in the United States.

The work of preparing this publication has been a joint effort of the entire staff of Farmer Cooperative Service. Under a committee—consisting of Martin A. Abrahamson, Chairman, Homer Preston, J. K. Samuels, Job K. Savage, and Mrs. Beryle Stanton—which was set up early in 1963, plans were made for this revision of FCS Bulletin 1.

This bulletin in most instances contains information up to June 1964. It was necessary to set an arbitrary cut-off date to save costs in proof changes and to make the material consistent.

Because cooperatives adjust and change continuously, many things have happened since June 1964—mergers and consolidations effected, new services and new facilities added, and later statistics issued. Later information than that carried in this Bulletin is available by writing Farmer Cooperative Service.

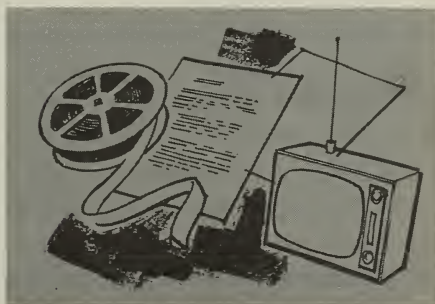
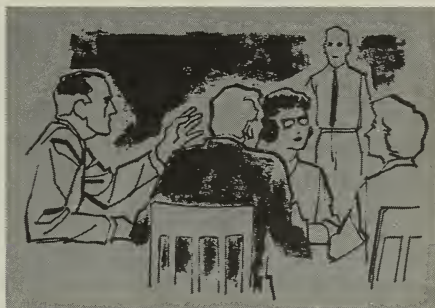
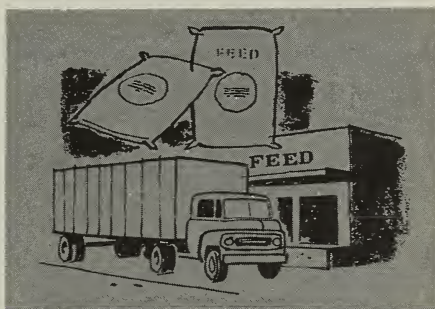
Joseph G. Knapp
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FARMER COOPERATIVES

in the United States



FARMERS use cooperatives in the United States to do a wide range of jobs. They join together in these businesses to market their products, buy their supplies, and provide the wide range of basic services essential in helping farmers adjust to the many changes occurring in present-day agriculture.

This bulletin gives a picture of what cooperatives really are and tells how and why they have developed in this country over the past century and a half.

It then goes into more detail on their selling, buying, and related service operations. It shows how cooperatives touch the lives of nearly all the farmers in the Nation.

To increase their financial returns, these associations early took the lead in better grading, in emphasizing quality products and supplies, and in translating research findings into practical application on the farms.

In many instances, these services have enabled the entire community—not just the cooperative members—to benefit from the greater income or better supplies the cooperatives have helped patrons to obtain.

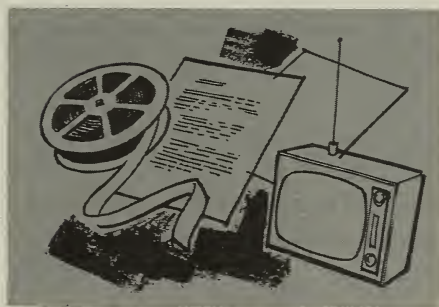
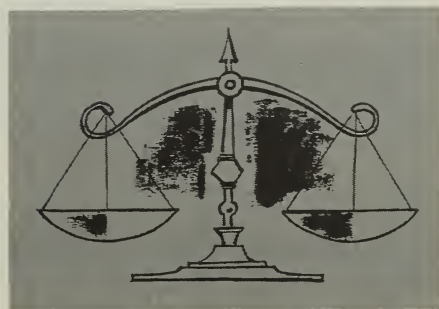
This bulletin traces the course these farmer associations have taken over the years and the reasons for the various shifts that have made them what they are today—the off-farm business enterprises of four out of five farmers.

It tells how cooperatives have helped protect family farms, the basis of our agricultural life, by helping the smaller farmer compete in an agricultural economy that is becoming increasingly mechanized and commercialized.

It also shows how better rural leadership has been developing from the experiences of thousands of farmers who have served as cooperative directors. And farmers working together for their mutual benefit have developed a spirit of self-help—of reliance, business know-how, pride of ownership, neighborliness, and greater community interest.

This publication then goes on to show the many benefits members obtain through their cooperatives. Through providing these benefits, the associations make substantial contributions to more efficient farm production and to the well-being of all rural people.

A LOOK AT COOPERATIVES



Basic Cooperative Features

by Joseph G. Knapp
Administrator
Farmer Cooperative Service

THIS section gives special emphasis to some of the more important ideas and features associated with cooperatives. It emphasizes

basic principles that are important in the United States, and benefits that members may anticipate through participation.

A Cooperative — What Is It?

AGRICULTURAL cooperation in the United States places special emphasis on meeting the economic needs of farmers in marketing products, obtaining production supplies, and securing many services needed in modern farming operations. It implies the voluntary joining together of physical, financial, and human resources to achieve this end.

Such joint efforts started informally with two or more farmers helping each other with harvest chores, erecting fences, or doing other work which could be done better by joint effort.

The aim of formal cooperation is to bring the benefits of permanent and efficient business organization to farmers in ways that temporary cooperative arrangements of the informal sort cannot accomplish. This type of cooperation sometimes results in business enterprises whose membership extends into several States.

Many definitions of cooperation have been formulated. Some are all inclusive; others emphasize par-

ticular aspects of cooperation such as economic, social, or legal phases. A few definitions are given to help understand the nature and objectives of farmer cooperatives:

"An agricultural cooperative is a business organization, usually incorporated, owned and controlled by member agricultural producers, which operates for the mutual benefit of its members or stockholders, as producers or patrons on a cost basis after allowing for the expenses of the operation and maintenance and any other authorized deductions for expansion and necessary reserves."¹

"A cooperative enterprise is one which belongs to the people who use its services, the control of which rests with all the members, and the gains of which are distributed to the members in proportion

¹ HULBERT, L. S. AND MISCHLER, RAYMOND J., LEGAL PHASES OF FARMER COOPERATIVES. Bul. 10. Farmer Cooperative Serv., U.S. Dept. Agr. 376 pp. 1958.



The board of directors represents the focal control point by members of a cooperative. A cooperative belongs to the people who use its services, the members—and they in turn elect other farmers like themselves to the board. The board then sets policy and hires a manager to handle day-to-day operations.

to the use they make of its services.”²

“Cooperation is organized working together for mutual benefits. Economic cooperation is a form of business with democratic ownership and control by member patrons having common needs, serving themselves on a nonprofit basis, and receiving benefits proportional to participation.”³

“A cooperative is a business voluntarily owned and controlled by its member-patrons and operated

for them on a nonprofit or cost basis.”⁴

Definitions vary, naturally, according to backgrounds and viewpoints of those making them. At best they present only a general idea of what a cooperative is and how such organizations are set up and operate.

Most cooperatives are incorporated. The minimum number of persons required for incorporation varies under the statutes of different States. In at least one State, two persons, and in a few States, three persons, are the minimum; but under most State laws, five is the smallest number allowed to incorporate.

Other requirements for an association are that it shall have officers, a name adequate for identification, and a mail address.

² REPORT OF THE INQUIRY ON COOPERATIVE ENTERPRISE IN EUROPE. 321 pp. U.S. Govt. Printing Off. Washington, D.C., 1937.

³ FETROW, W. W. AND ELSWORTH, R. H. AGRICULTURAL COOPERATION IN THE UNITED STATES. Farm Credit Admin. Bul. 54. 214 pp. 1947.

⁴ SCHAARS, MARVIN A. FARMER COOPERATIVES—WHAT THEY ARE AND WHAT THEY ARE NOT. Reprint 255, News for Farmer Cooperatives, March 1963.

In summary, the chief aim of farmer cooperatives is to help their members promote their own economic well-being by marketing farm products and obtaining needed supplies and services most effectively.

A cooperative buys, sells, and

provides needed services in order to help its members as producers increase their individual earnings. Cooperatives are part of our American system of private enterprise, just the same as individually owned businesses, partnerships, or other business corporations.

What Are Cooperative Principles and Practices?

CERTAIN principles underlie the cooperative form of business. And these principles are responsible for the practices generally acceptable to this form of business. Knowledge of both principles and practices is basic to understanding farmer cooperatives.

Three Basic Principles

The underlying principles that distinguish cooperatives from other types of free enterprise businesses are:

1. Operations at cost. Savings are distributed or allocated in direct proportion to the patronage of each member.

2. Democratic control by members.

3. Limited returns on capital.

These principles stem from the inherent nature of cooperative business and give it its distinctive character. They provide the rules of action necessary to accomplish the cooperative purpose.

Operations at Cost

Cooperatives operate on the basis of service at cost. Since it is not possible to operate so as to anticipate exact cost, they usually accomplish this by returning savings (or net margins) above costs to patrons on a basis proportional to their use of the services.

Patrons generally receive these savings within a reasonable period after the end of a fiscal year. Because these savings are determined on the basis of patronage, they are usually called patronage refunds.

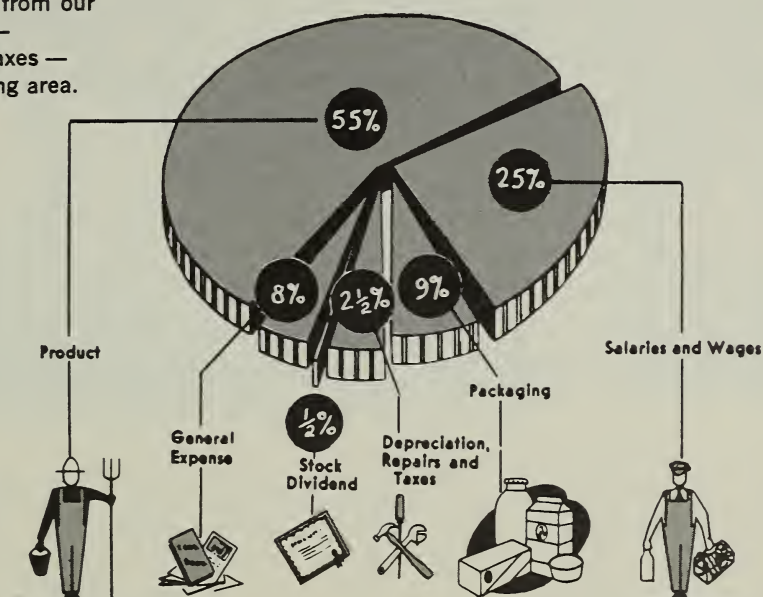
Many marketing cooperatives pool all proceeds from sales, take out operating expenses and other authorized deductions, and then distribute the net proceeds. In this way they are operating on a cost basis also, even though they have no patronage refunds as such to distribute to members.

Allocations of savings may be based on the value or on the number of units of the products handled. For example, a farmer who delivers 10,000 bushels of grain to his cooperative elevator has contributed 10 times as much to the business of his association as the farmer who delivers only 1,000 bushels. If the savings amount to 1 cent a bushel, the farmer who delivers 10,000 bushels is entitled to \$100 and the other farmer to \$10.

Patronage refunds are also a convenient means of helping the member finance his cooperative. They are not always distributed in cash. They are often issued as a certificate or other form of evidence of ownership to show that the member has a certain amount

Chart presented by Golden Guernsey Cooperative, Milwaukee, Wis., in a recent annual report shows how its sales dollar is distributed back into the trading area, excepting taxes it pays to State and Federal governments.

Out of each dollar received from our customers, all of it — except that paid in taxes — remains in this trading area.



of accumulated savings credited to him. When sufficient capital is thus built up, the certificates may be redeemed in the same order as issued.

This revolving fund method of cooperative financing is a working outgrowth of the basic cooperative philosophy that every man should support his organization to the extent he uses it and benefits from it.

Thus when authorized in its by-laws, articles of incorporation, or marketing agreement, a cooperative can use the accumulated savings of members for capital purposes. The member then shares in financing his association in direct proportion to the use he makes of it.

Under such a program, when the cooperative has accumulated adequate capital, the oldest member equities are revolved or repaid with

funds from equities or deferred refunds derived from current operations.

Some cooperatives do not distribute patronage refunds on the same basis to both members and nonmembers. When business is done with nonmembers, these cooperatives may return patronage refunds only to members. Others distribute to nonmembers but at a lower rate.

To the extent that members receive patronage refunds derived from business done with nonmembers, the cooperative has realized a business profit. Under these circumstances, patronage refunds to members may include elements of corporate net income, which is taxable. However, most cooperatives adhere to the operation at cost principle and distribute refunds to all patrons at the same rate.



At the annual meeting members exercise democratic control by electing the board of directors and by listening to an accounting of the past year's business from the cooperative employees.

Democratic Control

Democratic control of the farmers' business is a distinguishing principle of agricultural cooperation. It is fundamental that those who are to benefit from the organization must own and control the business. Otherwise the benefits they are seeking may not materialize, or they may go to others.

Democratic control may be achieved in different ways. It traditionally is accomplished by voting, one vote to a member. This method of voting has the advantage of making difficult any concentration of power in the hands of a few.

To accomplish this, many State laws provide that no member or shareholder of a cooperative shall be entitled to more than one vote regardless of the amount of stock owned or the extent to which the owner patronizes the cooperative.

About a fourth of the States now permit more than one vote to a member. The additional votes may be based on the number of shares of association stock held or on the amount of patronage furnished. Some limitation is usually placed on the number of votes permitted any one member.

Restricting the number of voting shares that one member may hold is the most common adaptation. Casting multiple votes by stockholders is regulated by both State statutes and cooperative practices. Twenty percent of the total is a common limitation; much smaller percentage restrictions, however, such as 3 or 5, are also used. Some fix an upper limit, such as 5 or 10, on the number of voting shares.

Some State laws permit cooperatives to give members voting rights in proportion to the extent to which they use the services of their

cooperative. This practice is based on the theory that the economic interests of member patrons are not equal.

Limited Returns on Capital

Capital invested in a cooperative is only a means to an end. When farmers set up a cooperative, they are not seeking outlets for capital investment.

Their business is farming, and it usually requires all their available capital. But they have products to sell and need to purchase supplies and services to carry on farming operations. Thus, it is around products grown, supplies needed, and services required that farmer cooperatives are built.

Capital is as necessary in a cooperative organization as in any other business. Members must finance buildings and equipment, and obtain or provide operating funds for day-to-day activities.

However, the main motive is to market farm products and obtain supplies or business services more effectively, rather than to make a profitable return on dollars invested. Therefore, payments for capital are usually limited to the "going rate."

Anything remaining after payment of costs belongs to the members. Such benefits are distributed to them in proportion to their individual use of the association's services.

Limitation by cooperatives of returns on capital is recognized in both Federal and State laws. These laws merely specify the maximum returns that may be paid on invested capital. Cooperatives may choose to pay any amount less than the maximum. In most State statutes, the limit on capital re-

turns is fixed at 8 percent although in a few States it is lower.

A basic Federal cooperative law—the Capper-Volstead Act—recognizes the principle of limited returns on capital by setting a maximum interest rate of 8 percent if members vote on any basis other than one man, one vote.

Agricultural cooperatives that qualify under Section 521 of the Internal Revenue Code are required to limit dividends on their capital stock (see p. 15).

This legislative recognition of the limitation of returns on capital in a cooperative business enterprise provides legal sanction to a busi-

ness. Cooperatives must operate as sound businesses to benefit members. In this new office building in Atlanta, Ga., employees of Cotton Producers Association have up-to-date facilities and equipment and businesslike surroundings.



ness procedure already recognized as sound among cooperatives.

Strict adherence to this principle of limited returns has not always been easy. In some instances, early farmer associations drifted into hands of individuals or groups other than cooperatives because control was based on capital with no limit placed on the amount of returns on that capital.

Sound Business Practices

Adherence to the principles previously discussed will not in itself guarantee success to any organization. There is no business magic in cooperation itself. It merely enables the members to do business in such a way that the benefits achieved come to them.

Sound business practices are also essential. Certain of these practices also help preserve the cooperative form of business organization.

A cooperative must follow sound operating policies to reach its greatest success. Some of these policies are directly related to the nature of the cooperative setup. Among them are those policies that govern the method of voting, qualifications

for membership, prices for commodities sold or purchased, sound financial programs, and methods of keeping members adequately informed.

It is approved cooperative practice for patrons also to be members of the association. The Capper-Volstead Act, previously noted, permits cooperatives to do no greater amount of business with nonmember producers than that done with members. The same leeway is permitted under other laws (see p. 14).

Management initiative often is related to, and limited by, the economic objectives of the cooperative members.

Other practices most cooperatives follow—and considered sound for any business—are: (1) Develop effective controls for the use of credit; (2) build adequate reserves; (3) have regular audits by competent outside accountants; (4) employ capable and honest managerial and other personnel; and (5) exercise care in selecting the board of directors, which represents the membership in formulating overall policy.

Cooperatives — What Types Are There?

COOPERATIVES cover almost all phases of farming activity. Yet it is somewhat difficult to prepare a logical and practical classification for types of these associations.

To be of most value—depending, of course, on the objective in making it—classification should be based on such characteristics as volume of business commodities handled, area covered, type of

membership, legal status, or functions performed.

By Size

One of the simplest classifications is that based exclusively on volume of business. According to business done, farmer associations range all the way from those with annual volumes of only a few hundred dollars to those doing millions of dollars worth of business.



In addition to improving incomes of farmer members, cooperatives provide jobs and added business for their home communities.

By Area Served

From the standpoint of area covered, there are local, regional, and national associations. Local associations operate around a concentration point or trading center with individual farmers as members. The services performed by these locals are usually more limited than those of regional or national associations.

Regional associations may cover several counties within a State, parts of several States, or all of several States.

In handling commodities or buying supplies, national associations carry on activities that are country-wide in scope.

By Type of Membership

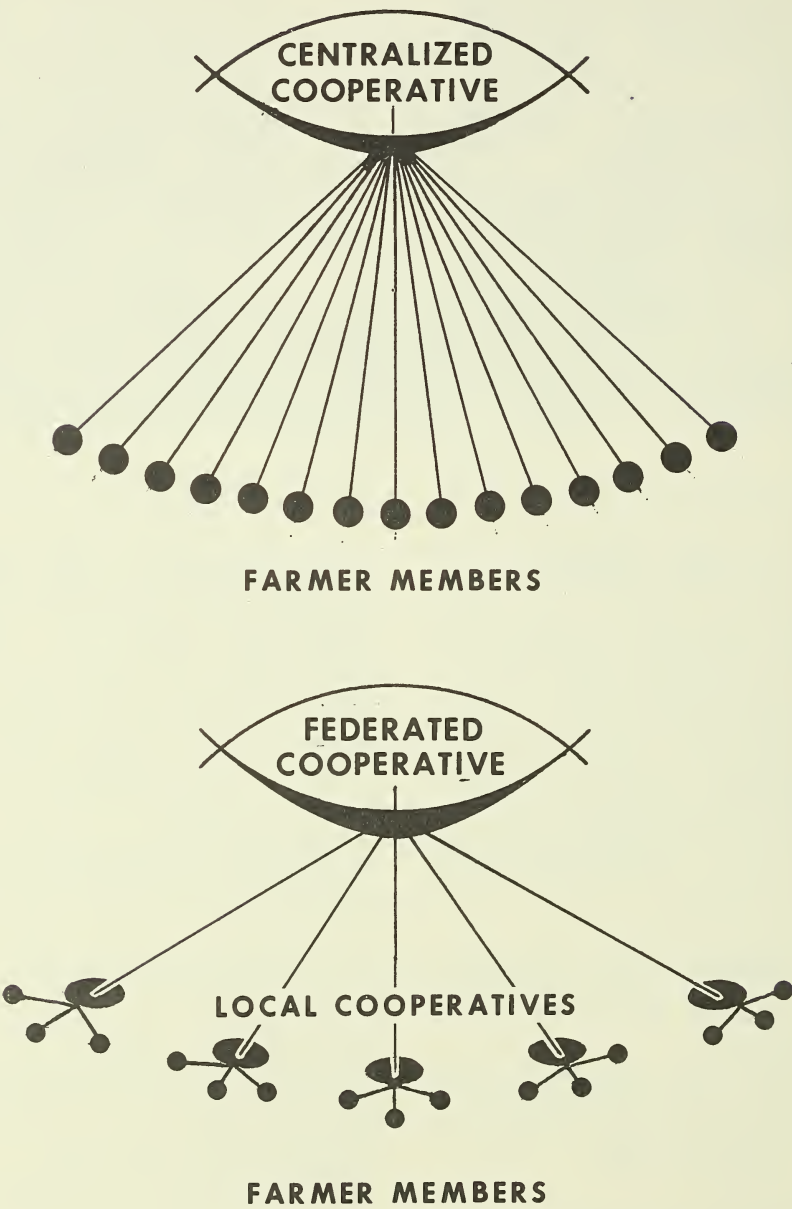
From the standpoint of type of membership, associations may be classified as local, centralized, or federated. The centralized association is an elaboration of the independent local.

The outstanding difference between the local and the centralized cooperative is in area covered. Functionally the centralized association has much in common with the federation but differs in that its members are individuals rather than associations.

Local associations make up the membership of a federation. In the federation, control rests with the local associations that comprise its membership. Each local association in turn is controlled by its own members, who are the chief beneficiaries from the operation of the federation.

Hybrid types frequently develop among federations. In the smaller federations, large growers may be members along with local associations. In the larger federations, smaller federations may be members along with the locals. There also may be federations of federations.

Figure 1.—Structures of centralized and federated cooperatives.



By Legal Status

From a legal standpoint, cooperatives may be classified according to whether they are incorporated or unincorporated, or are set up on the stock or nonstock plan. Legal status may vary without relation to size, area covered, or type of membership.

By Type of Business

In general practice, farmer co-

operatives have been classified into three types on the basis of primary functions performed. These primary functions are set up as marketing, production supply, and business services.

The latter includes associations providing insurance, credit, electricity, telephone, irrigation, health, transportation, storage and processing, artificial breeding of cattle, soil conservation, and production services, among others.

How Cooperatives Benefit Farmers and the Public

COOPERATIVES benefit farmers in many ways. The degree or or extent of the benefits, however, varies widely among cooperatives handling the same or different commodities.

It also is difficult to measure or evaluate exactly the intangible benefits farmers derive from operation of cooperatives such as those resulting from their competitive effect on price levels or margins, service, quality, and business performance. These benefit all farmers whether or not they are members of cooperatives.

The main benefits derived from cooperatives are economic in that they improve the net income of farmers. Estimates by Farmer Cooperative Service, U.S. Department of Agriculture, indicate that marketing, production supply, and related business service cooperatives realize net margins or savings of about \$350 to \$400 million a year.

Cooperatives increase the net income of farmers in the following ways:

Expertly selling farm products and buying farm supplies, exerting

bargaining and purchasing power, distributing quality production supplies, providing needed services, encouraging production and maintenance of quality products, improving farm efficiency, and operating at cost—after distributing net proceeds above operating expenses to member-patrons.

Cooperatives also provide by-product benefits of a noneconomic or social nature. By helping farmers—especially family-type operators—do a better and more profitable job of farming, cooperatives aid in developing stronger rural communities.

Cooperatives often have the largest payrolls and are the biggest taxpayers in town. Moreover, their business activities help maintain and support various service and financial institutions in local communities.

The benefits of cooperation, however, extend to groups other than those in agriculture. Cooperatives have encouraged the use of democratic principles in political, social, and economic activities.

Emphasis on business honesty, truthful advertising, maintaining

grades and standards, handling quality products, and eliminating market abuses are among the pace-setting accomplishments of cooperatives.

Cooperatives restrain monopolistic practices and thus contribute to overall marketing efficiency.

Finally, cooperatives provide leadership for agriculture and busi-

ness in strengthening our relationships with foreign countries. They do this by sharing information on the organization and operation of the cooperative form of business enterprise with leaders in developing countries. In this way, they help to establish and maintain free and democratic institutions in these countries.

Agricultural Cooperatives Have Legal Foundations

by Raymond J. Mischler*

Office of the General Counsel, U.S. Department of Agriculture

COOPERATIVES have had a considerable legal history. They now operate under well-defined

Federal and State statutes, and their Federal income tax status has been defined by statute and regulations.

Federal Statutes Confer Rights

THE Federal statutes do not contain a general definition of an agricultural cooperative association. In the Capper-Volstead Act, the Agricultural Marketing Act of 1929, as amended, and the Internal Revenue Code, however, agricultural cooperative associations are defined for the special purposes of such Acts. These definitions, although similar in some respects, are not identical. In addition, such associations are mentioned, but not defined, in several other Federal statutes.

The Capper-Volstead Act

The Capper-Volstead Act ⁵ was enacted to resolve any doubt regarding the right of producers of agricultural products to unite and

act through a cooperative association to handle and market their products without violating the antitrust laws.

The original Sherman Antitrust Act ⁶ did not contain any reference to cooperative associations. When this Act was amended by the Clayton Act ⁷ in 1914, section 6 of the Act ostensibly assured labor and agricultural associations of the right to exist without violating the antitrust laws. But this section referred only to nonstock associations and was generally not considered a guarantee to farmers of the right to form marketing cooperatives.

Thus, the Capper-Volstead Act was passed to make it clear that the elimination of competition between individual agricultural producers,

⁵ Approved February 22, 1922; 7 U.S.C. 291-292.

* Now deceased.

⁶ 15 U.S.C. 1, *et seq.*

⁷ 15 U.S.C. 12

which occurs when they act together through a cooperative association, would not in and of itself constitute an antitrust violation.

The Capper-Volstead Act by its terms refers exclusively to the marketing functions of farmer cooperatives, and does not include purchasing or service functions. The United States Supreme Court has held that the Act confers no special immunity on a cooperative association which would not exist for any other business entity under like conditions.⁸

For an agricultural cooperative to come within the Capper-Volstead Act, it must be composed of "persons engaged in the production of agricultural products as farmers, planters, ranchmen, dairymen, nut or fruit growers;" must operate on a mutual basis for the benefit of its members as producers; and must conform to one or both of these requirements:

1. No member of the association may have more than one vote, or

2. The association may not pay dividends on stock or membership capital in excess of 8 percent per year; and must not deal in the products of nonmembers to an amount greater in value than such as are handled by it for members.

When the Secretary of Agriculture has reason to believe that an association within the scope of the Act monopolizes or restrains trade in interstate or foreign commerce to such an extent that the price of any agricultural product is unduly enhanced as a result, he may then start an administrative proceeding against the association. If, follow-

ing a hearing, he finds that the facts are as suspected, he may issue an order directing the association to cease and desist from monopolization or restraint of trade. The Attorney General may institute court proceedings to enforce the Secretary's order.

The Agricultural Marketing Act

The Agricultural Marketing Act of 1929, as amended,⁹ defines a "cooperative association" which is eligible to borrow from a bank for cooperatives.¹⁰ This definition follows the Capper-Volstead Act definition on the requirement that the association be composed of agricultural producers, the ratio of nonmember business to member business, and the limitation of dividends on stock or voting rights or both.

However, the definition is much broader than the one in the Capper-Volstead Act in that it covers cooperative purchasing associations and those engaged in furnishing "farm business services."

It also provides that all business transacted by any cooperative association for or on behalf of the United States shall be disregarded in applying the nonmember-to-member business ratio.

The Internal Revenue Code¹¹ contains special provisions on the

⁹ 12 U.S.C. 1141j.

¹⁰ The Agricultural Marketing Act definition is also used in determining the cooperative associations which are to be exempt from certain requirements of the Federal Motor Carrier Act of 1935, 49 U.S.C. 301, 303.

¹¹ 26 U.S.C. 501(c) (15) and (16), 521, 1381-1383 inc.

⁸ *United States v. Maryland and Virginia Milk Producers Assoc., Inc.*, 362 U.S. 458 (1960); *United States v. Borden Co.*, 308 U.S. 188 (1933).

tax treatment of certain farmer associations which qualify thereunder and other cooperatives covered thereby. The requirements for qualification differ in some respects from those contained in the two definitions discussed previously. Since this subject is covered in more detail in the next section of this publication, it will not be discussed further here.

The Cooperative Marketing Act

The Cooperative Marketing Act of 1926¹² directed the establishment of a division in the Department of Agriculture to "render service to associations of producers of agricultural products, and federations and subsidiaries thereof, engaged in the cooperative marketing of agricultural products, including processing, warehousing, manufacturing, storage, the cooperative purchasing of farm supplies, credit, insurance, and other cooperative activities."

Under the Act of 1926, the U.S. Department of Agriculture, through the Farmer Cooperative Service, is authorized:

1. To acquire, analyze, and disseminate economic, statistical, and historical information regarding the progress, organization, and business methods of cooperative associations in the United States and foreign countries.

2. To conduct studies of the economic, legal, financial, social, and other phases of cooperation, and publish the results thereof. Such studies shall include the analyses of the organization, operation, financial, and merchandising problems of cooperative associations.

3. To make surveys and analyses, if deemed advisable, of the accounts and business practices of representative cooperative associations upon their request; to report to the association so surveyed the results thereof; and, with the consent of the association so surveyed, to publish summaries of the results of such surveys, together with similar facts, for the guidance of cooperative associations and for the purpose of assisting cooperative associations and developing methods of business and market analysis.

4. To confer and advise with committees or groups of producers, if deemed advisable, that may be desirous of forming a cooperative association and to make an economic survey and analysis of the facts surrounding the production and marketing of the agricultural product or products which the association, if formed, would handle or market.

5. To acquire from all available sources information concerning crop prospects, supply, demand, current receipts, exports, imports, and prices of the agricultural products handled or marketed by cooperative associations, and to employ qualified commodity marketing specialists to summarize and analyze this information and disseminate the same among cooperative associations and others.

6. To promote the knowledge of cooperative principles and practices and to cooperate, in promoting such knowledge, with educational and marketing agencies, cooperative associations, and others.

7. To make such special studies, in the United States and foreign countries, and to acquire and disseminate such information and

¹² 7 U.S.C. 451-457.

findings as may be useful in the development and practice of co-operation.

Brief references to other important Federal statutes which specifically mention farmer cooperatives follow.

The Packers and Stockyards Act

The Packers and Stockyards Act,¹³ enacted in 1921, provides for public regulation of commission men on stockyards and requires that the lawful rates established be collected and retained, except that "this shall not prohibit a cooperative association of producers from bona fide returning to its members, on a patronage basis, its excess earnings on their livestock, subject to such regulations as the Secretary (of Agriculture) may prescribe."

The Robinson-Patman Act

Section 4 of the Robinson-Patman Act¹⁴ enacted in 1936, provides that limitations on price discrimination shall not prevent "a cooperative association from returning to its members, producers, or consumers the whole, or any part of, the net earnings or surplus resulting from its trading operations, in proportion to their purchases or sales from, to, or through the association."

Several statutes have dealt with the right of cooperative associations of producers of agricultural

products to have duly authorized representatives admitted to the boards of trade and exchanges on which agricultural products are bought and sold.¹⁵ These statutes have also provided for recognition of the distinct character of patronage refunds of cooperatives in the rules of such boards or exchanges.

The Securities Act

The Securities Act of 1933 exempts securities issued by a farmer cooperative association which meets the definition contained in certain sections of the Internal Revenue Code.¹⁶

The Agricultural Marketing Agreement Act

The Agricultural Marketing Agreement Act of 1937¹⁷ provides:

"... The Secretary . . . shall accord such recognition and encouragement to producer-owned and producer-controlled cooperative associations as will be in harmony with the policy toward cooperative associations set forth in existing Acts of Congress, and as will tend to promote efficient methods of marketing and distribution."

Although additional statutes are in effect, the ones referred to clearly show the congressional policy toward farmer cooperatives.

¹³ Grain Futures Act of 1922, amended and name changed to Commodity Exchange Act, 7 U.S.C. 1; Act of March 4, 1927, 15 U.S.C. 431-433.

¹⁶ 15 U.S.C. 77c(a) (5).

¹⁷ 7 U.S.C. 610(b) (1).

¹³ 7 U.S.C. 207(f).

¹⁴ 15 U.S.C. 13b.



Farmer Cooperative Service (FCS) staff confer on a research project on cooperative feed mills. FCS is the USDA agency conducting research authorized under the Cooperative Marketing Act of 1926.



Among the provisions of the Internal Revenue Code of 1954 clarifying the tax treatment of cooperatives is one specifying that the cooperative must be for farmers or fruit growers, or be a similar association that markets products of members or other producers or purchases supplies and equipment for use of members or other persons.

Federal Income Tax Status Is Defined

THE Internal Revenue Code of 1954, as amended by the Revenue Act of 1962, contains special provisions on the tax treatment of (1) certain farmers' associations which qualify thereunder and (2) all corporations operating on a cooperative basis to which the revised statute specifically applies.

Those farmer cooperatives qualifying under section 521 of the Code generally operate so as to have little or no taxable income. Associations which do not qualify (and about half of the existing associations do not) are liable for income tax on receipts devoted to the payment of a return on capital and on receipts which they do not pay to patrons as true patronage refunds in the manner prescribed by the Code.

This discussion will point out some of the more important phases of the statutes and regulations on this subject.

For Marketing and Farm Supply Cooperatives

The pertinent sections of the Internal Revenue Code of 1954 relating to marketing and supply associations are sections 521, 1381, 1382, and 1383 (the latter three sections comprising Subchapter T of the Code added by the Revenue Act of 1962).

If a cooperative can meet the requirements specified in section 521, it can qualify for the tax treatment provided in Part I of Subchapter T. The chief require-

ments for such qualification are these:

1. It must be a farmer, fruit grower, or like association organized and operated on a cooperative basis to (a) market the products of members or other producers, or (b) purchase supplies and equipment for the use of members or other persons.

2. Substantially all its stock (other than preferred nonvoting stock) must be owned by producers marketing products or purchasing supplies through it if it is organized on a capital share basis.

3. The dividend rate on capital shares must not exceed the legal rate of interest in the State of incorporation, or 8 percent a year, whichever is the greater, based upon the value of the consideration for which the capital share was issued.

4. Financial reserves are restricted to those required by State laws or those that are reasonable and necessary, and must be allocated to patrons unless the cooperative includes them in computing taxable income.

5. The business with nonmembers may not exceed 50 percent of the cooperative's total business, and the purchasing for persons who are neither members nor producers may not exceed 15 percent of the cooperative's total purchasing.

6. Nonmembers are to be treated the same as members in such business transactions as pricing, pooling, or payment of sales proceeds, in prices of supplies and equipment

in fees charged for services, or in the allocation of patronage refunds to the accounts of patrons.

7. Permanent records of the patronage and equity interests of all members and nonmembers must be maintained.

8. The legal structure of the organization must be cooperative in character and contain no provisions inconsistent with these requirements, and the association must be actually operated in the manner and for the purposes outlined in the requirements.

In computing its net income, an organization qualifying under section 521 may, in addition to all other deductions authorized by law, deduct—

1. Amounts paid by it during the taxable year as dividends on capital stock; and

2. Amounts paid to patrons, or allocated and disclosed to each patron in the manner authorized in Subchapter T, with respect to income during the taxable year which is derived from sources other than patronage (as, for example, rents received, investment income, gain on sale of depreciable property and capital assets, and income from business done with or for the United States Government).

Such an association also may exclude from gross income patronage refunds (called "patronage dividends" in the Code) returned in the form and within the time prescribed in Subchapter T.

A cooperative which does not qualify under section 521, but which is covered by the definition in Subchapter T, files a regular corporate income tax return but is entitled to exclude from its gross income patronage refunds paid in

the form and within the time prescribed in Subchapter T, under the same rules as are applicable to the so-called "exempt" cooperative.

In order for cooperatives to exclude patronage refunds they must be paid in cash or in "qualified written notices of allocation" on which the patron has (1) the option to redeem the allocation in cash during a 90-day period after issuance or (2) consented to treat the refund as his income. The patron may give this consent individually in writing, the cooperative may by its bylaws require members to give this consent, or the patrons may consent by endorsing and cashing a check representing at least 20 percent of the total patronage refund. In any event, an allocation is deductible only if at least 20 percent is paid in cash.

If cooperatives to which Subchapter T applies do not pay their patronage refunds in the form prescribed, they must include such "nonqualified allocations" in their income in the year issued. However, a deduction may be taken in the year in which a nonqualified allocation is redeemed in cash. If at that time the cooperative is not able to make use of a deduction, a refund may be obtained with respect to the taxes paid on this amount in the year the allocation was made.

Under the law, any patronage refund or other distribution by an exempt cooperative which the cooperative may exclude from its income must be included in the income of the patron when he receives notice of it, if the amount arises from business activity of the patron. Also, distributions in redemptions of "nonqualified alloca-

tions" can be included in the year received if they affect the patron's income from a business and do not arise out of personal living items. Thus, the principle of a single tax currently on taxable income generated through cooperative enterprise was established by this legislation.

Any dividends on capital from a so-called "exempt" cooperative are fully taxable to the shareholder (that is, not subject to the dividend credit which applies generally).

For Corporations Financing Crop Operations

Paragraph (16) of section 501(c) of the Internal Revenue Code of 1954 provides for exemption from Federal income tax of certain corporations set up for the purpose of financing crop operations by organizations which qualify under section 521. It reads as follows:

(16) Corporations organized by an association subject to part III of this subchapter or members thereof, for the purpose of financing the ordinary crop operations of such members or other producers and operated in conjunction with such association. Exemption shall not be denied any such corporation because it has capital stock, if the dividend rate of such stock is fixed at not to exceed the legal rate of interest in the State of incorporation or 8 percent per annum, whichever is greater, on the value of the consideration for which the stock was issued, and if substantially all such stock (other than nonvoting preferred stock, the owners of which are not entitled or permitted to participate, directly or indirectly, in the profits of the

corporation, on dissolution or otherwise, beyond the fixed dividends) is owned by such association, or members thereof; nor shall exemption be denied any such corporation because there is accumulated and maintained by it a reserve required by State law or a reasonable reserve for any necessary purpose.

For Mutual Insurance Companies or Associations

Farmer mutual insurance companies or associations meeting the provisions set forth in paragraph (15) of section 501(c) of the Internal Revenue Code may qualify for exemption. This paragraph (15) provides exemption for mutual insurance companies or associations other than life or marine (including interinsurers and reciprocal underwriters) if the gross amount received during the taxable year from interest, dividends, rents, and premiums (including deposits and assessments) does not exceed \$150,000.

Steps Necessary To Qualify

If a farmer cooperative desires to qualify under section 521, the regulations require it to request a "letter of exemption."

It may obtain such a letter by filing an application on Form 1028 with the District Director of Internal Revenue Service for the district in which its principal place of business is located. To establish qualification under paragraphs (15)

and (16) of section 501(c), quoted above, the organization must file the information required by the applicable sections of the regulations of the Internal Revenue Service.

Once the letter is granted it is not necessary to refile unless substantial changes occur in the organization or its activities. However, any such changes are required to be reported. This is done in connection with the annual returns, discussed below.

Exemption continues only so long as the legal setup and the operating methods are in accord with the requirements of the applicable statute and regulations. Hence a change in status can occur even though the letter of exemption is not withdrawn or cancelled.

Returns Required of Cooperatives

Annual returns by all cooperatives subject to Part I of Subchapter T are required to be filed by the 15th day of the 9th month following the close of the taxable (calendar or fiscal) year of the cooperative.

Cooperatives qualified under section 521 file on Form 990-C, and all others use the standard corporate Form 1120. Cooperatives *not* qualified under 521 can use the longer filing period only on a showing that they are obligated to—or have actually—paid at least 50 percent of their patrons' net margins as patronage refunds.

Information returns by organizations exempt under 501(c) must be filed annually by the 15th day of

the 5th month following the close of the organization's annual accounting period.

All farmer cooperatives must report to the Internal Revenue Service all payments of interest, dividends, and patronage dividends (as these terms are defined in the Code) of \$10 or more a year to any one person and also send a statement of these payments to the recipient thereof indicating the amount in each category reported. The statements must show the name, address, and account number of the recipient. Heavy penalties are imposed for failure to make these reports.

The reports required are (1) in the case of dividends and interest, to be made with respect to amounts paid on or after January 1, 1963; and (2) in the case of patronage dividends [refunds], with respect to amounts paid on or after the first day of the first taxable year of the cooperative, beginning on or after January 1, 1963. The reports must be furnished to the Government on or before February 28 of the year following the calendar year for which the return is made; the statement must be sent to the payee on or before January 31 of that year.

Exemption From Stamp Tax

An association qualifying under section 521 is exempt from payment of a documentary stamp tax on the issue or transfer of shares or certificates of stock and certificates of indebtedness (See section 4382 (a)(3) of the Internal Revenue Code of 1954).

Cooperative Management— Unique, Difficult, Effective

by Job K. Savage

Director, Management Services Division

COOPERATIVE management is unique in that it includes members, directors, and hired managers. This feature imposes special problems on cooperative management not experienced in other corporate business enterprises. Some of these problems arise from the necessity of maintaining the cooperative nature of the organization. They relate to financing,

member and public relations, distribution of patronage refunds, and cooperative taxation.

Management's effectiveness in coping with these problems has grown over the years. To better understand the importance of cooperative management, it is necessary to sketch some of the past events that have shaped its development and structure.

American Cooperatives Were Small

AROUND 1870, cooperatives were small and few in number. Usually they were locals, financed by the sale of stock to members and nonmembers. Others, however, were unincorporated. The legal status of these associations was yet to be determined.

Hired managers of these early associations managed and also served as clerk and bookkeeper, and in some instances swept the floors. Management of these first organizations was on a pioneering or trial and error basis. There were no blueprints.

Each succeeding stage of cooperative development contributed to management knowledge. Business principles were introduced in arriving at decisions. Founded on earlier experiences, a management pattern based on Rochdale principles began to emerge.

By 1920, the Aaron Sapiro era that emphasized cooperatives as a

means to give farmers control of crops in the marketplace was underway. Regional and national cooperatives, particularly in the field of marketing, began to emerge.

National cooperatives failed, as some others formed during this era did. A primary reason for this failure was the fact that many associations were organized too hastily and often they were "brain children" of promoters rather than of the producers. Also, farmers did not understand the significance and the intricacies of production controls.

Weak management was also a frequent cause for failure of cooperatives. Management had not yet acquired sufficient knowledge of communication, transportation, and public relations and in the legal and political fields to successfully operate.

But important management lessons had been learned.

The stage was set for the management advances that were to follow. Sound business principles were becoming a part of the kit of tools as cooperative management adapted to modern needs.

It was during this period that the skills of management made their greatest advance. Research and educational assistance made major contributions to this progress.

Management Lessons Learned

WHAT are some of the definite contributions of cooperative development over the years to the body of management knowledge? First came the recognition that management needed a uniform pattern of operation. The Rochdale principles provided a start in this direction.

Also, sound operating practices were emerging apart from principles based on the successes and failures of the existing cooperatives.

The increased size of cooperatives created a need for manage-

ment to give more attention to member relations aspects. And the experiences of farmers with many of the early stock companies that were controlled by investor interest rather than members as patrons forced management to become better informed on cooperative financing.

It became necessary for management to become familiar with cooperative laws as numerous State laws affecting cooperatives were passed. The passage of the Capper-Volstead Act in 1922, which authorized cooperative asso-

Early cooperatives were small, and served only their immediate vicinity. Here a group of cotton farmers deliver to their gin.



ciations of producers of agricultural products, was likewise important in adding the power of legal recognition to the distinct features of cooperatives.

Management skills were further challenged when managers had to learn how to operate centralized or federated regional and sometimes national associations, often with several hundred local associations as members.

To further complicate managements' problems, many cooperatives not only crossed commodity

lines, but also engaged in both marketing and purchasing.

Management had to progress with these organizational changes they helped bring about. New communication techniques had to be developed. Commodity and division heads had to become part of the management team.

Specialized and highly trained personnel such as public and member relations experts, legal counsel, information specialists, certified public accountants, transportation experts, and others were employed.

Management Responsibility Divided

TODAY cooperative management may be thought of as a mixture of art and science in combining resources to produce a product or a service the cooperative's members need. The resources required to produce these services or products are more than land, capital, and labor. They are also people, ideas, knowledge, and ways and processes to achieve goals.

Therefore, management becomes complicated by having to deal with intangibles as well as tangibles. It is these intangibles of management that make its methods of operation part art rather than pure science. Based on the lessons of the past and present knowledge, however, management is using more science and less art in its functioning.

The duties of the cooperative management team have by now developed into clearer divisions of responsibilities. This has been brought about largely through study and analysis of management successes and failures over the years, beginning with the early development of cooperatives.

Members

Members make some of the basic managerial decisions when they :

1. Adopt and amend bylaws and articles of incorporation.
2. Approve capital changes and additions of major facilities and services.
3. Elect and remove directors.
4. Require officers, directors, and employees to comply with provisions of the articles of incorporation and bylaws.
5. Participate in activities of the association and understand its limitations and possibilities.
6. Support the association with their patronage.
7. Help to finance their association.

Directors

Directors have a responsibility to:

1. Plan the operations of the cooperative.
2. Determine policy.



Directors need to be well trained and well informed to fulfill their responsibility to the members they represent. Three Iowa cooperatives—with the help of Farmer Cooperative Service—sponsored this school for directors of some 400 locals.

3. Select the manager.
4. Represent members' interest.
5. Raise funds.
6. Borrow money.
7. Select banks.
8. Arrange for audits.
9. Keep records of board business.
10. Establish rules for guidance.
11. Evaluate results of operations.
12. Are legally responsible for the actions of the cooperative as a corporate body.
13. See that their association is efficient and remains competitive.
14. Maintain the cooperative status of the business enterprise.
15. Improve and strengthen their own performance.
16. Be loyal to the association they represent.

Hired Management

Hired management has a responsibility to:

1. Plan.
2. Assist in policy making.
3. Build member confidence and public understanding.
4. Execute policy.
5. Select, develop, and make the best use of personnel.
6. Manage the funds of the association.
7. Maintain adequate operating records.
8. Build a strong organizational structure.
9. Supervise and control operations through proper decision making.

Quality of Management Recognized

IN 1963, over 9,000 cooperatives had more than 7.1 million members with a total business volume of more than \$13 billion, exclusive of business between cooperatives. This indicates that cooperatives are becoming of increasing importance, particularly when it is noted that total cooperative business in 1951-52 was \$9.4 billion. The success of these cooperatives was largely due to the quality of their management.

This quality has made it possible for farmers to own and control such enterprises as feed mills, fertilizer plants, cane sugar mills, petroleum refineries, large-scale farm supply wholesale and retail outlets, and many other important marketing, purchasing, and service associations.

In addition, farmers and rural residents are increasingly turning to the cooperative idea in connection with the multiple use of their farm lands. This is particularly true in connection with the formation of forestry, recreation, and grazing associations.

Farmers can direct all of these highly complex enterprises to their own advantage because they have hired technical business and management abilities that individually they do not possess.

An appreciation of United States cooperatives and their management in foreign countries is indicated by the number of foreign trainees from all over the world constantly seeking guidance in the organization and management of cooperatives in the United States.



Staff of Farmer Cooperative Service, USDA, confer with a group representing cooperatives in Niger. FCS annually helps plan training programs for over 600 foreign nationals coming to this country under various international programs.

Farmer Cooperative Service contributes to the overall American effort to provide technical assistance to foreign nationals who seek knowledge of our agricultural cooperatives.

In this effort, direct cooperation is maintained with the following agencies: Agency for International Development, International Agricultural Development Service, Food and Agriculture Organization of the United Nations, National Rural Electric Cooperative Association, The Cooperative League of the U.S.A., International Cooperative Training Center at Madison, Wis.,

and others sponsoring foreign participants.

A member of the staff provides technical advice and assistance to the cooperating agencies involved with the programs and projects for foreign visitors.

Since the formal effort to provide technical assistance began in 1950, the number of participants has increased steadily. Over 3,000 individuals from 117 countries have been assisted under this program since 1950, and the annual rate of visits from those concerned with agricultural cooperatives now exceeds 600 a year.

Cooperative Management Looks Ahead

FEW informed persons question that the management of a cooperative is increasing in complexity. Economic integration, the combining of economic functions, has become a common term.

Specialized cooperatives are disappearing. No longer is a farm supply cooperative just a place where you buy supplies. Today, if it is like most, it has expanded or is planning to expand into marketing. Marketing cooperatives are expanding into farm supplies. And both of these types have added services such as credit, insurance, breeding rings, and the like.

Mergers and consolidations are prominent topics on the agendas of cooperative directors. Undoubtedly, times have changed. Much of the change represents progress. But progress is not a blessing without problems for management. It has to decide what new services and supplies and what new marketing functions are to be added or perhaps curtailed.

Management is learning that increased size and complexity of cooperatives create new problems in financing and public and member relations. They require a better understanding of the economic nature and objectives of farmer cooperatives.

In financing, for example, there is a need for more risk capital. Analysis and research are needed to develop the most effective sources of this financing and the factors controlling its availability to cooperatives. It is management that must stimulate this effort and put the findings into practice in the cooperative.

In developing new transportation techniques, cooperative management is becoming aware that it must bestir itself. Today the transportation bill for products marketed and purchased by farmer cooperatives is estimated to be \$1 billion a year.

A recent study by Farmer Cooperative Service shows that fewer

than 10 percent of farmer cooperatives in the United States had anyone devoting either full time or part time to transportation management. And only 2 percent of the cooperatives had anyone devoting full time to transportation management.

In rural areas development, cooperative management has a new challenge and a new tool. Agricultural cooperatives have played a leading role in the development of rural America.

To help farmers and their cooperatives adjust their sights and operating practices to cope with economic changes, the U.S. Department of Agriculture inaugurated the Rural Areas Development (RAD) program in 1961.

In 1964 Congress passed the Economic Opportunity Act (EOA) that among other actions provides for loans and technical aid grants to cooperatives serving low income rural residents.

The technique in the RAD program and under EOA is to get rural people to work together to bring about improved use of agricultural and other natural resources. In so doing more local industries and jobs will be developed in rural areas.

Federal and State departments, land-grant colleges and universities, and civic organizations provide active support for the RAD program. Cooperative management, too, has an important role in this activity because cooperatives



This exhibit prepared by FCS shows how cooperatives help develop new services and job opportunities and create more income in rural areas.

are suited to assist in this program and in the process will obtain major economic benefits for their members.

To summarize, the path of cooperative progress is marked by the management milestones along the way. In the beginning, nearly 100 years ago, cooperative management practices were largely patterned after those existing in other forms of corporate enterprises. Over the years failures and successes have provided management with a solid body of knowledge.

Today we recognize that the management team of the cooperative is made up of members, directors, and a hired manager and his staff. The respective duties of each have been delineated.

Management has a uniform pattern of operations that it can follow. It is aware of the importance of member and public relations. It does have sound knowledge in matters of financing.

With the recognition of cooperatives as legal corporate bodies, management has become more versed in legal matters affecting their organizations. The development of cooperatives on a large-scale and multipurpose basis is no longer an insurmountable problem for cooperative management. It now employs modern communication techniques and avails itself of the knowledge possessed by specialized and highly trained employees. In brief, management has learned the value of modern technology and how to harness it to its purposes.

In looking ahead, cooperative management is faced with increased emphasis on mergers and consolidations, problems of greater size and complexity of cooperatives, a need to develop new transportation techniques, and greater understanding and appreciation of the importance of rural areas development to cooperative progress.

Financing Cooperatives

by David Volkin

Chief, Business Administration Branch

FARMERS in the United States finance their cooperatively owned businesses by using all the standard methods employed by other business corporations plus a few unique to cooperatives.

In the early part of the 19th century, most farmer cooperatives in existence were only small informal groups of farmers trying to better their lot by joint action. In these early years, local investors and general farm organizations played an important role in fur-

nishing "seed money" for these new ventures. In general, however, farmers furnished most of the capital to operate their associations.

As cooperatives grew, however, and their marketing, farm supply, and other business services expanded, they found that it was neither wise nor necessary to rely entirely on internal or equity financing to meet all their financial needs. About half the farmer associations operating today are using borrowed funds.

Sources of Capital

MOST of the money required to operate a farmer cooperative comes from farmer members who own and use it to market their crops, obtain their farm supplies, or furnish various farm services. This conforms with the general principle that the members who stand to gain most from the use of the cooperative's services should assume the primary risks.

In addition to members, equity capital may be obtained from non-member patrons; other cooperatives; marketing and supply companies; and individuals, firms, and organizations interested in the welfare of the cooperative.

Equity capital is defined as that which the association obtains for capital purposes without assuming a legal obligation to redeem it at a stated time or under stated conditions.

Cooperatives obtain debt capital—that is, incur legal liability to repay borrowed funds under stated conditions—from the same sources as they obtain equity capital as well as from banks for cooperatives, commercial banks, insurance companies, and others. Banks for cooperatives are the major source of borrowed funds, supplying well over half of all debt capital outstanding.

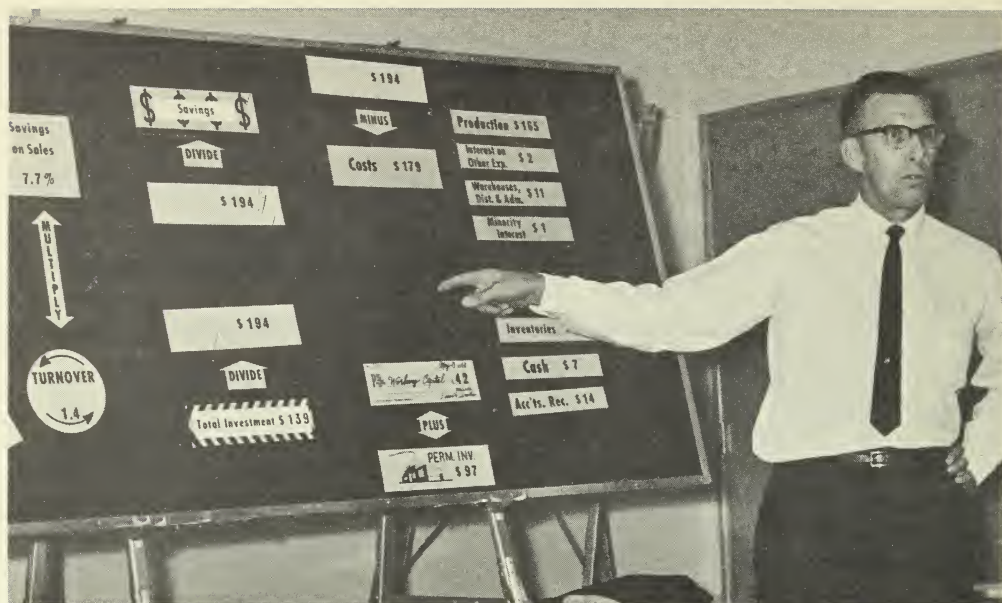
Methods of Acquiring Capital

THE reinvestment feature of the usual financial plan of a cooperative provides for retention within the capital structure of savings from operations. These savings belong primarily to patrons and are allocated to them in proportion to their use of an association's services.

Thus there is little opportunity for increased growth value of capital stock as a reflection of corporate earnings, as in other businesses. For this reason—plus limitations on voting rights and transfer of shares—investment in the capital stock of a cooperative has little appeal to the outside investor who is interested primarily in capital gain.

In addition to retaining savings and net margins, farmer members finance their cooperative by authorizing capital deductions (retains) from sales or service proceeds, by purchasing its securities, and by making outright gifts of capital. Purchasing associations are expressing increased interest in acquiring capital by the capital retains method.

Changes in the tax treatment of farmer cooperatives included in the Revenue Act of 1962 (see page 19) point up the necessity for cooperatives to explore all methods of acquiring capital through direct investment to complement acquisition of capital internally by retention of net savings.



A visual presentation of an analysis of the financial condition and operations of a farmer cooperative by J. D. Miller, Executive Director, School Division, Consumers Cooperative Association, Kansas City, Mo.

Forms of Capital

THE manner by which cooperatives represent the equity and debt capital furnished by members and nonmembers is, for the most part, similar to the manner that other businesses represent equity and debt capital.

Equity Capital

Equity capital may be represented by common or preferred capital stock or by stock credits to indicate fractional shares. But the financing characteristics that distinguish farmer cooperatives from other business enterprises also give rise to forms of equity capital peculiar to cooperatives.

For example, cooperatives issue membership certificates, certificates of equity, or certificates of interest and certificates of indebtedness with or without maturity dates to

give a written instrument showing net margins retained and allocated to their members and patrons; to represent outright purchase by members, patrons and others; and to represent deductions (retains) from sales and service proceeds authorized by members, patrons, and others.

Many cooperatives may not issue tangible evidence of equity; they may simply allocate these amounts as book credits and notify their patrons of the amount credited to them.

In addition, capital reserves established for definite purposes may be set up in the books and allocated to members and patrons on the basis of patronage. Capital reserves are derived from authorized deductions and retention of net margins.

Capital reserves also are retained on an unallocated basis. These are usually derived from the cooperative's taxable income. They are generally designed to absorb possible operating losses and are frequently established to comply with State laws.

Those cooperatives that pay dividends on outstanding equity capital usually do so at a nominal rate. The dividend rate on preferred stock may be somewhat higher than on other forms of equity to make this class of stock appealing to outside investors who are interested in income rather than capital gain.

Debt Capital

Cooperatives generally evidence debt capital in conformance with the requirements of the various lending institutions or individuals from whom they borrow funds.

The cooperative Farm Credit System—through the 12 district banks for cooperatives and the Central Bank for Cooperatives in Washington, D.C.—is an important source of short, intermediate, and long-term credit for farmer cooperatives. Banks for cooperatives supplied almost 58 percent of the outstanding borrowed capital in 1954. Half of the associations



Cooperatives obtain over half their debt capital from banks for cooperatives. This picture represented the peak of a billion dollars in loans reached in 1961 by the Berkeley Bank for Cooperatives since its organization in 1933. J. Russell Kennedy, seated left, Executive Vice President, Calcot, Ltd., Bakersfield, Calif., receives the loan check from H. R. Howells, Vice President of the bank. Standing are G. L. Seitz, left, Assistant Manager of Calcot, and Walter A. Rubin, Vice President and Treasurer of the bank.

in the survey with borrowed capital obtained all or a portion of it from banks for cooperatives.¹⁸ The Farm Credit Act of 1955 provides a plan under which farmers, through their cooperatives, will eventually completely own the net worth of the banks for cooperatives.

The amount needed, custom, legal requirements, security, repayment provisions, loan costs, purpose of the loan, availability of funds, bargaining position, and caliber of management are all factors in determining not only the lending source but the terms and conditions of a particular loan arrangement.

Caliber of management and repayment ability assume greater importance in cooperative loan negotiations than the nature of the security offered.

Cooperatives also represent allocated retentions of net savings in the form of certificates of indebtedness (C.I.'s) that have the character of debt; that is, they may bear interest and have a maturity date. Certificates of indebtedness are also sold to individuals as bonds and debentures are.

In addition to formalized evidences of debt, purchasing cooperatives also obtain financing from their wholesale suppliers by virtue of the credit extended on merchandise purchased. Marketing cooperatives obtain a measure of financing by virtue of the time lag between receipt of the commodities from member-patrons and actual settlement with them. The

section in this bulletin on Marketing Cooperatives (page 87) has a more detailed description of the methods used by farmer cooperatives to make payments to producers.

Interest paid by cooperatives on outstanding indebtedness will vary according to supply and demand factors affecting the cost of money acquired in a particular debt arrangement.

Cooperatives also make use of the lease-purchase method of financing in order to gain the use of facilities without tying up working capital in long-term fixed facilities. A cooperative may lease fixed assets directly from the owner, or it may sell all or a part of its own fixed assets to another firm which will in turn lease these facilities back to the cooperative.

Revolving Fund

Many associations use the revolving capital plan of financing. Under this plan, patronage refunds are retained in the business for 1 or more years until necessary capital is accumulated. These retentions may be shown by certificates of capital stock, equity, or indebtedness, or by book credits, allocated reserves, or statements of deferred patronage refunds.

Refunds are redeemed at the discretion of the board of directors—generally in cash, but possibly in another form of equity or debt instrument—usually in the order of their issuance. The period of revolving may vary from 3 to 10 years, or possibly longer, if particular circumstances warrant.

The revolving capital plan has these advantages: (1) It provides a convenient means by which each

¹⁸ HULBERT, HELIM H. ; GRIFFIN, NELDA ; AND GARDNER, KELSEY B. METHODS OF FINANCING FARMER COOPERATIVES, General Report 32, p. 29. Farmer Cooperative Serv., U.S. Dept. of Agr. 1957.

member contributes capital in proportion to the amount he uses the association, and (2) it tends to keep the ownership of the association in the hands of active members or patrons by calling in the oldest outstanding equities each year.

On the other hand, the revolving capital plan has some disadvantages. For example, operating differences between cooperatives may cause differences in capital requirements that in turn may lengthen the redemption period. The

lengthened redemption period may place a financial burden on some members.

And the unequal financial ability of members themselves to furnish capital proportional to their use of the cooperative's services may add to the problem of achieving acceptance of the revolving plan method of financing.

Thus successful operation of a revolving capital plan calls for members' understanding of their financing obligations, especially in an expanding activity.

Farmers here are reaping some of the economic benefits from doing business with their cooperative—receiving their patronage refunds.



Financial Planning

COOPERATIVES may be in a more favorable position than other business enterprises to gauge and relate their financial requirements to the economic needs of their patrons.

Thus cooperatives have potentially greater opportunities than other business enterprises to do forward financial planning because of their inherently close-knit relationships with their patrons, who in turn have a member-owner interest in the affairs of their cooperative.

On the other hand, a cooperative's relatively limited field of membership serves to restrict the scope, if not the quality, of its financial planning.

Management of cooperatives—like that of other business enterprises—is concerned with the availability of capital, the terms under which it is acquired, and the problems of allocating it among the assets to be financed.

But a responsibility unique to the management of cooperatives is that of conducting the financial affairs of the association in such a manner as to enhance its cooperative character.

A cooperative's financial policies have a significant impact on its degree of adherence to the cooperative principles of operation at cost, limited returns on capital, and democratic control by those who use its services.

Communications Vital to Cooperatives

by Beryle E. Stanton

Division of Information, Office of Management Services ¹⁹

EARLY day cooperatives in the United States actually began with an action in communications—with a few farmers getting together to communicate to each other their dissatisfaction with the

prices they had to sell or buy for, or the services that were available.

From then until the present day, communications have been a vital and essential element in any successful cooperative enterprise.

The Way Communications Developed

COMMUNICATIONS in United States cooperatives grew

¹⁹ Mrs. Stanton was formerly Director, Information Division, Farmer Cooperative Service, and continues to do information work for FCS in her new position.

from the simple and casual to the complex and far-reaching systems of today. They grew from passing on information by word of mouth to using all the electronic marvels of our age—mobile telephones in fieldmen's cars, television, and high-

The early generation of leadership built cooperatives with a dedicated belief in their right to own and control such marketing and purchasing organizations. Here W. G. Wysor, General Manager of Southern States Cooperative, Richmond, Va., for its first 25 years, presents a token of appreciation to one of the several early directors who received such recognition at the 1963 annual meeting.



This oil painting portrays a meeting of the farmers who organized Missouri Farmers Association, Columbia, Mo.—a meeting held at a country schoolhouse near Brunswick, Mo. It was unveiled in 1964 at the new schoolhouse to commemorate the 50th anniversary of the meeting and the birth of the cooperative.



quality magazines that reach half a million members.

They have grown to keep up with the expansion of small cross-roads cooperative to large regionals with several hundred local cooperatives as members.

Yet most cooperatives have learned they must still keep the human touch, keep the ideas of benefits and services to people so inherent in cooperatives foremost in the content and execution of the communications job.

Early-Day Communications

All United States cooperatives began small. Then communications were relatively simple—from neighbor to neighbor, from manager to member and member to manager, from director to manager and member and in reverse, usually by conversation.

For example, early organizers—generally leading farmers with only the vision of what a cooperative could do—would drive their teams up and down the country roads, talking to their neighbors about the need for a cooperative. Later when the cooperative was in business, members would drop by the office and in this way obtain the most recent information on operations.

As Rural Free Delivery (RFD) of mail began and rural telephones came in, cooperatives began to make use of these.

One of today's successful livestock cooperatives began in the Midwest with a sort of "postcard ring." A few farmers decided they would let each other know by postcard when they were ready to ship their hogs to the city markets. That way they could get a cheaper

freight rate on a full carload of hogs, and they would have more hogs to interest the buyers.

The "long ring" on the country telephone line would tell farmers who had cooperatively bought a rail car of feed or seed that it had arrived. They could then hitch up their wagons and drive to town to unload their share from the siding.

The little red schoolhouse also played its part in early day communications—often serving as the organization site and the place for board and member meetings.

Early cooperative leaders had an intense fervor, a sort of evangelistic approach to their cooperatives. This early generation of leadership—many of them only recently retired from boards of directors or key management jobs—carried the rank and file membership along with their enthusiasm.

Became More Complex

Over the years cooperatives began to develop tools for communication, gradually evolving them as times and needs changed. They learned early they must do their own communications work.

They began to issue regular membership publications to reach their larger memberships. They began to plan regular meetings where both the why of the cooperative and its results were explained, as the manager and the board could no longer talk to each member individually.

They began to advertise, to merchandise, and to build up good relations with those they did business with.

They learned, as they grew larger and membership began to reach over whole States and then

several States at times, that communications were more than a part-time job for a manager or some other employee.

Thus they began to hire public relations specialists, editors and other information workers, and fieldmen and employees with some communications knowledge or potential.

These cooperatives learned they must build goodwill on facts and performance—that it is a continu-

ing job to keep even those who know something about cooperatives fully informed.

In addition, they learned they must tell the same basic cooperative facts over and over again as new members and new generations of employees come along.

Thus they gradually developed an educational, informational, or communications program that embraces all the modern techniques and practices of reaching people.

The People To Reach

COMMUNICATIONS in cooperatives have developed definite patterns to follow—back and forth between and among members, directors, and employees.

They involve channels outside cooperatives, and this makes the job even more complex and demanding.

Both the member users and the public need to know and understand more about the inner workings of cooperatives than is true for many other types of businesses.

Members

The cooperative's first communications responsibility rests with keeping members informed about the business.

Members also have the responsibility of keeping themselves informed about their cooperatives. And they have the further responsibility of communicating with their cooperative management, giving the business their patronage, investing money when they can and it is needed, making their voice heard in management by electing the best qualified directors to represent them, asking for services

modern farming needs if their cooperative is lagging, and airing any grievance or misunderstanding promptly.

Research has shown high relationship between member satisfaction with his cooperative and his participation in it. Such participation included attending meetings and getting facts and information.

Some cooperatives have full-scale women's programs—Southern States Cooperative, Richmond, Va., and Dairymen's League Cooperative Association, New York City, in particular. Many others have less formalized programs, but do have special features for women and include them in the overall communications approach.

Other cooperatives have also found women valuable in member and public relations work. And the women who have been active in cooperative work report, as did the men, that the cooperative communications task broadened their educational horizons, taught them to speak in public, and gave them added friends and contacts, as well as a better understanding of the cooperative business.

Some associations also do a special communications job with the young people. This is partly for public relations impact, partly to inform future members about cooperatives they may want to use as they start business for themselves, and partly to keep young farm people informed, as they are usually involved in the farming business of their parents.

Directors

Farmers on the boards of directors are important in the official communications chain in United States cooperatives. Experience has shown that farmers who are good at communicating as well as in background and experience make greater contributions to the cooperative business as directors.

These experiences in communications have often brought far-reaching results to farmers. Many of our key agricultural leaders of

today first learned to speak in public and express themselves in an organized fashion. They have broadened their outlook through cooperative experience.

The directors who serve on the board of a regional cooperative covering several States have a particularly vital role in keeping information flowing both ways—from headquarters to locals to farmer members and back up. They can be compared to a Congressional representative in that they must communicate the individual farmer's needs and wants, and must also be able to communicate back to him the broader good of the whole cooperative enterprise.

Directors have a three-way approach to their communications efforts—to learn and be told all they can about the cooperative's operations, to keep in touch with what members think, and to be the cooperative spokesman in outside groups.



Directors have communication responsibilities in a cooperative as well as business responsibilities. They must learn all they can of operations and what members think of the business, and be spokesmen for the cooperative among members and in outside groups.

They need to know how to give talks at meetings, to act as presiding officers, to conduct themselves satisfactorily in board meetings. They need to read and listen outside the cooperative to learn all they can about business and agriculture.

Directors keep in touch with what members think through casual conversations, visits to the farm, and by their comments in meetings. And they have a duty to transmit these members' views to others in cooperative management.

Directors are usually leading farmers in the community already, or they would not be elected to such positions of responsibility. Upon election, they become spokesmen for their cooperative in both direct and indirect ways.

Their participation in community affairs often creates a favorable opinion of the cooperative and also gives them an opportunity to explain the true nature of the cooperative business in conversation or in discussion.

The president of a cooperative has a particular responsibility to be good in his communications with the public—as he represents the cooperative in many ways.

Managers

As the tangible business heads of the cooperative enterprises, managers are usually focal communications points.

The successful managers are good at personal communication with members, employees, and the public. They must be able to direct an effective communications program through employees and directors, using all the techniques and ideas available and applicable.

Like the directors, they need to know what members think and to represent them with the public.

All this means that cooperative managers have found they need that extra plus in human and public relations in addition to being sound businessmen.

Employees

Employees in cooperatives need to be fully informed on their specific jobs and to have a broad understanding of the cooperative they work for.

Employees are often the main point of contact with members, often the visual picture a member carries with him of his cooperative. They must respect the patron as an owner and be ready to answer his questions on the cooperative or to find an answer for him.

The fieldman has a particular communications obligation—to keep informed and to pass on the knowledge to members he visits.

Those with specific communications assignments such as editors, advertising people, and member relations specialists, have the special responsibility of communicating the cooperative idea as well as business aspects.

Salesmen, buyers, transportation specialists, and other employees with outside contacts also need to know about the cooperative aspects of the business in order to communicate effectively with the general public on the enterprises they represent.

Other Contacts

Other people and groups involved in the total communications task of cooperatives include other cooperatives, State and national cooperative organizations, educa-

tional groups, community groups and businesses, trade associations, State and Federal Government representatives, and the general information outlets.

Cooperatives have over the years interchanged information, ideas, and ways of doing business. State and national cooperative organizations have responsibilities for ex-

plaining cooperative business to the public and to the people they deal with from day to day.

In general, this public relations aspect of cooperative communications is one of the hardest tasks confronting these agricultural businesses, and one for which they have not yet always found the best approach.

Communication Methods Used

MOST of the larger cooperatives have people specifically trained in communications work. Smaller ones usually depend on the manager, field man, or another employee to take on this work along with their other duties.

Trained Professionals Now Numerous

In recognition of the specialized field and growing importance of

communications, cooperative employees have formed several professional associations.

They are:

Cooperative Editorial Association. Formed in 1954. Membership comes from staffs on cooperative magazines, newspapers, and newsletters. Purpose is to improve the effectiveness of these publications. Meets annually in an intensive 2½-day workshop on techniques. Publishes a newsletter to exchange ideas.

Four Regional Membership Groups. Started in 1958. Members are cooperative employees and others with special interest in and responsibility for member relations programs. Purpose is to improve their competence in member relations work. Each regional group meets annually for a workshop-type program.

Advertising Council of Cooperatives. Started back in the early 1940's as an informal group. Members are cooperative em-

Cooperatives find they need to provide their own educational material to teachers—material such as this kit prepared for social study teachers by the Indiana Farm Bureau Cooperative Association, Indianapolis.



ployees who work in the general advertising field—advertisements, package design, exhibits, billboards, and the like. Purpose is to exchange ideas and techniques and stimulate better advertising.

Other Professional Activities.

Two national contests each year also have as their purpose the stimulation of better communications in cooperatives.

The National Council of Farmer Cooperatives holds an annual Information Fair. Judges awarded honors to top winners from 867 entries in some 42 classes of information and promotion material in the 1963 fair. Judges also comment on good and bad points of the entries.

National Milk Producers Federation has an annual Dairy Co-op Press Sweepstakes. Its cooperative members enter their membership publications in the contest and also receive evaluations on their publications from the judges.

Specific Methods Used

The methods cooperatives use to reach different groups of people vary according to the size of the cooperative, the needs of the times, the scope of the job, the money and talent available, and the makeup of the group to be reached.

The methods these groups use to communicate back to and through the cooperative also vary.

Over the years cooperatives have found, however, that a few basic techniques stand at the top of the list. They have made special studies or general evaluations of techniques themselves, have called on Farmer Cooperative Service for research, and have also hired outside firms to conduct such studies for them.

Two FCS studies, one in 1950, and the other in 1960, showed cooperative membership publications—magazines, newsletters, and newspapers—and personal contacts ranking at the top in order of effectiveness with member communications. Other effective methods reported included meetings, annual reports, special publications and letters, educational exhibits, movies, radio, and television, bus tours to facilities, and



The Information Fair of the National Council of Farmer Cooperatives and the Dairy Co-op Press Sweepstakes of the National Milk Producers Federation—both held annually—award prizes to best jobs in communications fields. Winning membership publications in the Sweepstakes were displayed at an annual meeting of the Federation, with James Click, then Managing Editor of top winner, Milk Producers News published by Maryland & Virginia Milk Producers Association, Arlington, Va.

contests. The outside local press and farm magazines have also shown up as effective in many areas.

Methods also vary between locals and regional or federated cooperatives. Many times the regional cooperative provides guides, personnel, and valuable assistance to the locals in their communications job.

One regional reports its communications services are an important secondary service it provides locals. And it sees what it does as supplementing and complementing the communication services of the local itself.

Membership Publications

A number of research studies on effectiveness of cooperative newspapers, newsletters, and magazines have shown high readership by membership—as much as 98 percent in one survey conducted by Farmer Cooperative Service of one regional's monthly magazine.

Publications have risen in importance as the greater number of members and larger territory served have made personal contacts less feasible, particularly from a regional's headquarters office.

One regional cooperative reported that the membership publication is the one regular connecting link between member and association.

Another reported its magazine also conducted much of its courtesy relations with the public—Extension Service, vocational agriculture instructors, other cooperatives, and communications people. It also sent the publication to potential new members.

Actually these membership publications reach most of the farm families in the Nation, plus some outside readers just cited.

Their prime purpose is to publish news of cooperative activities and do an educational job on principles, but they also carry market news and outlook, research applicable to the cooperative member business, production and management ideas, family material, editorials, and advertisements, of both cooperative and noncooperative items in some cases.

One interesting sidelight! While many organizations have started magazines, one magazine actually started a cooperative. For it was the “persistent and convincing writings” on the need for farmer cooperatives by William Wirth, when he was editor of *The Missouri Farmer*, that brought farmers around to organizing local clubs that eventually grew into the Missouri Farmers Association, Columbia—one of the larger marketing and purchasing cooperatives that reached its 50th year in 1964.

Some cooperatives now also have special publications for employees, directors, and local managers.

Personal Contacts

Good day-to-day personal contacts throughout the whole complex of a cooperative have been shown to be vital to its continued success.

Managers and directors have available to them many workshops and other training type meetings to improve their communications with people, as well as their basic knowledge of the cooperative idea.

Employees have a major communications responsibility, as they will often be the one point of contact most members of the larger cooperatives have with the association. Petroleum tank-truck drivers, bulk milk-truck drivers, soil

testers, and others who go out to the farms have the responsibility of knowing enough about the co-operative business to answer farmers' questions.

Members' contacts with neighbors and others in the community have often spelled the difference between a good and a bad opinion of the cooperative in the area. When they know enough about their business to explain it intelligently, they can often correct erroneous impressions.

Many cooperatives have delegate systems or advisory committees of members in order to keep the flow of information moving out to the individual members in each locality, and to report back to management on needs and wants of the members.

Annual Meetings

A cooperative must hold an annual meeting each year, and this has been made into an effective device for communications within the organization. Such meetings have also often proved good devices for public relations work with the general public.

Here business is conducted—members elect directors, officials make reports on the business and operations, and members vote on any important actions or changes in the bylaws.

Members often hear speakers on general subjects outside the specific cooperative report on business. And as cooperatives have grown over the years, they have achieved an important enough place in the Nation to attract nationally known speakers for audiences of farm people numbering well up into the thousands.



Annual meetings are effective points of contact for members and management. Here a member asks a question of hired management at the regular question and answer session of the meeting of Southern States Cooperative, Richmond, Va.

Cooperatives usually have some entertainment features at their meetings. They show movies, use modern visual techniques, have displays and exhibits, and in general try to portray in one meeting a picture of and a feeling for what the cooperative is and does.

Most of them now also invite press, radio, and television people to the meeting and try to get good press coverage both before and after the meeting in the area. They also invite others in the community as a part of the public relations activities of the coopera-

tive—bankers, church leaders, educational leaders, county agents and extension people, and many others.

The regionals often help locals with their annual meetings, if the locals request such help.

In addition to the regular annual meetings, cooperatives also often use district regional and area meetings to reach more of the members. They also hold special meetings when needed—to discuss a proposed merger with another cooperative, as one example.

Annual Report

The annual reports can be issued in many ways—as a separate printed report, a mimeographed balance sheet, or a special supplement in the membership publication.

They usually include a message from the president, the manager's

report, highlights of the past year, and often comparisons with previous year's business.

On special occasions such as 25th or 50th anniversaries, these reports often go into more details on history and accomplishments and evaluation of cooperative activity.

In recent years, cooperatives have been using color, good design, and other techniques to make these reports attractive to the readers. They also have been working at simplifying the financial reports to make them more understandable. They distribute these reports at their annual meetings or mail them direct to members.

Many cooperatives now use their annual reports as a public relations tool and send them to key community and regional leaders and press people.

Cooperatives spend many millions of dollars each year to keep their brands among the leaders in the food field. Sun-Maid Raisin Growers of California, Fresno, and Sunsweet Growers, San Jose, have long conducted joint advertising campaigns in major communications outlets.



Jewel Box Cookie Booklet

• The Jewel Box Cookie Booklet sparkles with color and ideas! It brings you 33 unusual cookie recipes to enjoy, to treasure, plus easy directions for making the "Jewel Boxes." Get this booklet now, in specially marked sacks of Pillsbury's BEST Flour picturing it on front.

SUN MAID RAISINS

• For cookies that are real gems of flavor, bake with SUN-MAID Raisins! Moist, chewy SUN-MAIDS keep cookies fresh lots longer, and increase their food value, too! That's because these choice raisins are a natural source of energy, vitamins, iron and other minerals. SUN-MAIDS are packed in protective, flavor-sealed cartons. So they're as sweet and fresh when you use 'em as the day they left summery California to brighten wintertime meals.

SUNSWEET PRUNES

◀ Handy Inner Bag

• New, SUNSWEET "Super-Tenderized" Prunes in flavor-sealed carton with exclusive, handy, removable, cellophane inner bag. More tender. More moist. Quicker cooking! SUNSWEET Prunes are "sugarplum" good. They're tree-ripened, sun-sweetened and packed with natural fruit sugars. What a boost of energy and flavor they give to your Jewel Box Cookies! Also, new SUNSWEET Pitted Prunes are now available in many areas. No pits!

Visual Aids

Cooperatives use slides, film strips, movies, television, and displays and exhibits at fairs and meetings as a continuing part of their communications activities.

In addition, many of them consider their plants and facilities as visuals that represent the cooperative to the members and the public. They stress attractive buildings, good displays and layout inside, and trucks that can be traveling billboards.

Brand names have also become a part of cooperatives' visual images. In the past decade many additional associations have changed their corporate name to conform to the brand they do business under. Brand names and corporate identification symbols then are used on buildings, moving equipment, publications, advertisements, and other material of the cooperative.

Advertising and Promotion

The cooperatives that market many of the leading brand foods in the United States use all the advertising techniques and outlets that other businesses do—magazines and newspapers, radio and television, billboards, good package design, display pieces for consumer outlets, and the like.

Some of them spend millions of dollars over the years in building up consumer goodwill. A recent study by the U.S. Department of Agriculture showed that 574 cooperatives had spent \$25 million in 1 year for advertising.

Farm supply cooperatives also do much internal advertising of their products so members know what they have available—in member publications, by special mail

pieces, in the local press, and over local radio and television.

Cooperatives advertise their organization by presenting the actual picture of their operations. For example, they put ads in local papers telling exactly how much tax they pay to support local, State, and Federal Governments. They also advertise their contributions to the community in the way of salaries and money spent for community services and business.

Other Activities

Cooperatives often use special events to build goodwill among members and the public. These may be anniversary celebrations, open houses for new plants, ground-breaking ceremonies. They invite special guests and speakers and get press and air coverage of these events.

Many State Governors now proclaim certain months as "Co-op Month." The cooperatives in the State then have special events throughout that month to call attention to the importance and contributions of cooperatives. In 1964 for the first time, the U.S. Department of Agriculture recognized October as Cooperative Month. It held a 3-week observance that included: Exhibits in its Patio by 16 agencies and the Farm Credit Administration, talks and seminars, and related activities.

Cooperatives set up special bus tours for members, wives, and young people to visit plants and facilities. As an example, busloads of members from some part of a nine-State area visit Consumers Cooperative Association's Research and Demonstration Farm near Kansas City each week.



The 1,000 or so young people who attend the annual summer conference of the American Institute of Cooperation take a quiz toward the close of the conference on what they have learned about cooperatives.

Today's cooperative member and director must be good businessmen in order to be a success both in farming and in cooperative activities. Here a group of directors of Midland Cooperatives, Minneapolis, inspect one of their investments, a refinery at Cushing, Okla.



Groups of cooperatives in nearly all States now help with contests—speaking, essay, or cooperative activity ones—for young people. From these go 800 to 1,000 winners

each year to the national meeting of the American Institute of Cooperation. These young people go to general sessions and have their own discussion groups and sessions.

Communications Constantly Adjusting

COOPERATIVES have found they must adjust and adapt their communications activities just as they do their other operations.

They are emphasizing the greater financial investments members need to make to keep their businesses successful today.

They are stressing the sound business aspects of being a part of a cooperative for today's business-oriented farmer, who is also a good businessman if he succeeds. And they are using different techniques to reach today's members. The social pull of cooperatives is not as strong as in the early days; therefore, other appeals are made.

Cooperatives are proving a good crossroads for city and country to meet in many areas, since they combine both the farm and town business aspects.

In the early sixties, cooperatives have had an increasingly demanding communications task in the numerous mergers occurring. They first had to inform members and the public, and at the right time, that the merger was being considered, and why it was being considered. They then took on the task of "selling" the merger if that was needed. Most cooperatives involved in mergers have found that communications timing and content was one of the most delicate and crucial moves in the merger.

Cooperatives thus have found great challenges in communications over their long history. Some they met successfully, others not so successfully. But gradually they have built sound techniques and professional talent to continue this essential element of the work.

Agricultural Cooperation—Pioneer to Modern

by Martin A. Abrahamsen

Deputy Administrator, Farmer Cooperative Service

FARMER cooperation in North America dates back to colonial days. Farmers helped each other to clear land, erect buildings, and construct roads.

They also organized societies in the 1780's to import purebred cattle and later had community drives of livestock to the eastern coastal

cities. Early agricultural history often refers to husking bees, threshing rings, bull and stallion rings, cheese rings, and other forms of group activity.

As farmers began to produce more products than they could consume, they looked to cooperatives to find a market for them. They



The story of farmer cooperatives is the story of farmers' efforts to improve their lot—a story that's been unfolding for 150 years now. Here farmers study the annual report of their cooperative at its annual meeting.

also used cooperatives to purchase supplies needed for production. The earliest efforts were informal, with neighbors pooling orders for a quantity of supplies. Farmers also joined together to obtain needed services—for example, insurance protection against fire and wind.

As more and more farmers participated in such buying, marketing, and service activities, they put cooperation on a business basis. Formal cooperatives incorporated, employed managers, and acquired facilities.

The development of agricultural cooperation is a story of the farmer's never-ending efforts to better his lot. For 150 years he has been learning how to cooperate with his neighbors to their mutual advantage in obtaining services related to farming and farm living.

Farmers have experienced many failures in such efforts. However, through trial and error sound prin-

ciples and techniques have evolved.

The history of cooperative activities by U.S. farmers divides itself logically into six periods. Each was molded by leaders emerging from a constantly increasing number of progressive farmers. Current economic conditions, legal concepts, adjustments in agriculture, changing economic conditions, and the impacts of worldwide social, economic, and political forces influenced each of these periods.

The first period, beginning shortly after 1800 and ending about 1870, was one of experimentation; the second from 1870 to about 1890 resulted from early encouragement by general farm organizations; the third from 1890 to 1920 saw the rapid organization of business cooperatives; the fourth from 1920 to 1933 was characterized as orderly commodity marketing; the fifth from 1933 to 1945

may be described as one emphasizing sound business principles; and the sixth from 1945 to the present (1964) is characterized by adjustments to profound national and

international events affecting agriculture. This last period is marked by growth, diversification, integration, consolidation, and modernization.

Farmers Experiment With the Idea 1810-1870

THE first period was one of searching for self-help methods and techniques farmers might use to solve some of their economic problems.

Farmer cooperative business organizations had their beginnings in detached groups scattered throughout northeastern States, the Cotton Belt, the Upper Mississippi Valley, and the Far West.

Early efforts at "associated or cooperative dairying" were attempted at Goshen, Conn., about 1810. Several cooperative cheese and butter factories were established in New York and other States by 1860. More than 400 cooperatives in the country were processing dairy products by 1867.

Grain and livestock farmers also became interested in cooperative marketing. In 1857, Wisconsin farmers formed the Dane County Farmer's Protective Union and erected a grain elevator at Madison. Some 10 years later, farmers

in Illinois organized two grain marketing associations. Old records indicate that farmers in Bureau County, Ill., developed a cooperative hog auction about 1860.

Farmer clubs, organized in Illinois and Wisconsin in the 1850's, attempted to purchase production supplies. A farmers' purchasing association was organized in 1863 at Riverhead, N.Y., to buy fertilizer for its members.

The first association for the cooperative marketing of fruit was formed at Hammonton, N.J., in 1867. It expanded in 1884 to include cooperative purchasing. In general, the early cooperative business ventures blazed new trails and then disappeared.

In 1865, Michigan passed what is believed to be the first law recognizing the cooperative method for buying and selling. Some years earlier the New York legislature had provided for cooperative mutual insurance companies.

Encouragement by General Farm Organizations 1870-1890

TWO general farm organizations, the Grange and the Farmers Alliance, made important contributions in introducing cooperatives into the principal agricultural areas of the Nation.

Enter the Grange

The Grange, known officially as "The Order of Patrons of Husbandry" was founded in 1867. Oliver Hudson Kelley, an employee

of the U.S. Department of Agriculture, was active in its formation. Largely because of pressure from its local units to deal with the economic problems of members, the Grange soon turned its attention to cooperatives. Cooperative marketing was emphasized in some States, cooperative buying in others, and both marketing and buying in still others.

Early Granges assembled farmers' orders and placed them with dealers who shipped carloads of supplies direct to farmers. Price concessions were obtained from suppliers for performing these services. In the years 1871-76, more than 20,000 local Granges, as well as some 26 State agency systems, were established. County Granges in many cases acted as business enterprises for members of the local units.

In 1874, the National Grange sent a representative to Europe to gather information about cooperation. As a result, the Grange began to sponsor the organization of business cooperatives.

An early writer on cooperation said:

"The great contribution of the National Grange was the formulation and distribution in 1875 of a set of rules for the organization of cooperative stores. These rules were based on those of 28 weavers of Rochdale" (The Rochdale Equitable Pioneers Society, organized in 1844, was the first consumer cooperative in Rochdale, England.)

Many cooperative Grange stores were organized in Michigan, Maine, New York, Kansas, Texas, and California. They sold groceries and clothing as well as general farm supplies, hardware, and agri-

cultural implements. These were more successful than the earlier Grange organizations, which sold goods below going prices or distributed savings on the basis of stockholdings.

Grangers in the South concentrated on marketing cotton. State organizations in Alabama and Mississippi selected established cotton firms and put them under bond. The Alabama Grange had an agency in New York City to handle cotton on consignment, and the Mississippi Grange had its own representative in Liverpool. Granges in these States also leased warehouses for receiving, grading, and financing cotton. In Georgia, Louisiana, and Arkansas, Granges established agencies for handling members' cotton in large lots. A separate cooperative was formed in Texas to handle cotton on commission.

Forty Grange cooperatives in Iowa were operating elevators by 1871. Kentucky Grangers sponsored warehouses for receiving and handling tobacco. Those in California launched a large program for cooperative marketing and purchasing. In the 1870's, the California State Grange exported wheat. Later its business association handled wool and farm products of all kinds on both a warehouse and a commission basis. Orders also were solicited for general merchandise, groceries, and farm implements.

Grange banks were established in Kansas and California, and the manufacture of farm machinery was undertaken in Iowa.

As the country recovered from the depression of the 1870's, fewer Granges were organized and many cooperatives went out of existence.

But the impetus given by the Grange to farmer cooperation lasted well into the 20th century. In fact, as its name indicated, the Cooperative Grange League Federation Exchange, Ithaca, N.Y. (G.L.F.)²⁰ had Grange antecedents, as the Grange wholesale association operating in the State of Washington did. An important contribution of the Grange was its demonstration that the Rochdale type of cooperative, which handled goods at prevailing prices and distributed net savings according to patronage, offered the most promising basis for sound cooperative efforts.

²⁰ G.L.F. merged with Eastern States Farmers Exchange, West Springfield, Mass., on July 1, 1964, to form Agway, with headquarters in Syracuse, N.Y.



From early country elevators (above) to grain terminals like this one of Union Equity Cooperative Exchange, Enid, Okla., with storage capacity approaching 20 million bushels—that is the story of the changes farmer cooperatives have brought in their grain handling.



The Farmers Alliance

Following the decline of the Grange, the Farmers Alliance sprang up in several areas, and later the locals united and spread over the whole South. Efforts of the Alliance in cooperative business enterprises were similar to those of the Grange. They trace their beginning to the latter years of the decade of the 1880's.

One of the most significant Alliance efforts was forming the Florida Fruit Exchange, Jacksonville. It employed State purchasing agents to handle bulk shipments of twine, fertilizer, feeds, and seeds. It started a number of cooperative stores and grain elevators.

Other organizations that became

a part of the Alliance during the period were the Agricultural Wheel in Arkansas and the Northwestern Alliance in Illinois.

During the 1880's, many farmers unaffiliated with general farm organizations also continued forming marketing cooperatives. Associations to sell fruit formed in Delaware, New York, California, and Florida. Others for marketing livestock, wool, tobacco, walnuts, and dairy products came into the picture. By 1890, there were some 1,000 active cooperatives. Of these, 75 percent handled dairy products; 10 percent, grain; and over 10 percent, fruit and vegetables. The words "growers protective union" appeared in the names of a number of these cooperatives.

Many Cooperatives Organized 1890-1920

AGRICULTURAL cooperation firmly established itself as a part of the economic system for serving farmers during the three decades from 1890 to 1920. Local cooperatives formed in nearly all States to market products that could be handled in carlots.

By the end of this period, the number of active cooperatives was estimated at more than 14,000. Marketing associations were approaching an alltime peak of over 12,000, and production supply associations totaled about 2,100.

The local shipping associations developed to full stature. Products were shipped to the central markets, where they were usually sold on consignment by a commission agency. Farmers soon began experimenting, however, with ter-

minal selling. Federations of local shipping associations and a few centralized cooperatives started with the hope of handling a substantial percentage of the production in their area.

Some of the important cooperatives formed during the 1890's were the California State Raisin Growers Association, Fresno; the Hood River Fruit Growers Union, Hood River, Oreg.; the Riverside Growers and Packers' Protective Union, Riverside, Calif.; and the Southern California Fruit Exchange, which later became the California Fruit Growers Exchange and is now known as Sunkist Growers, Inc., Los Angeles.

At the same time cranberry growers in New Jersey and Massachusetts and grape growers in New

York, Michigan, and Iowa organized cooperatives to market their products.

Cooperative egg marketing was given a new start in California, and potatoes and other produce along the Atlantic coast began to move through cooperatives.

The Farmers Union

The Farmers Educational and Cooperative Union of America was launched in Texas in 1902 as an outgrowth of the Farmers Alliance movement. Although the Farmers Union considered educational and social problems, it placed major emphasis on economic activities. From the start, it advocated and sponsored cooperative business enterprises.

In the early years, it performed purchasing and marketing services through Farmers Union locals but soon began organizing local cooperatives and, in later years, federated and centralized regional associations. The Farmers Union was at one time active in Texas, Louisiana, Arkansas, and Mississippi. Since then it has become especially active in Oklahoma, Kansas, Nebraska, Colorado, North Dakota, South Dakota, Minnesota, Montana, and Wisconsin.

In the South, the Farmers Union placed emphasis on storing and marketing cotton and improving the credit and mortgage system. It also used the business agent system for buying supplies for members of Farmers Union locals. In the Midwestern States, it gave attention to organizing cooperative elevators, creameries, livestock shipping associations, stores, and oil and supply cooperatives.

The Farmers Union consistently advocated buying production supplies by the carlot. The secretary or purchasing agent of a local, sometimes jointly with a nearby local, made up carlot orders of supplies needed by members. State organizations, directly or through a subsidiary, developed contracts with supplying business firms. Eventually these activities led to organizing cooperatives to distribute production supplies. The State Farmers Union in Nebraska established a wholesale supply purchasing department in 1914 to serve Farmers Union locals, other cooperatives, and some farmers directly. In 1919, a separate wholesale cooperative, the Farmers Union State Exchange, Omaha, Nebr., was formed.

The Farmers Union exercised a great deal of influence in organizing cooperative livestock shipping associations, both local and regional, and commission associations at terminal points. The first of these commission associations was set up at South Omaha, Nebr., in 1917, and this pioneered the way for several similar organizations. One was established at St. Joseph, Mo., the same year. In 1918, the Farmers Union Livestock Commission opened at Sioux City, Iowa; and Farmers Union Livestock Commission Association, Kansas City, Kans., organized. A Farmers Union livestock commission association also was formed at Denver, Colo., in 1919.

The Farmers Union helped organize many cooperative grain marketing associations, particularly in Kansas, Nebraska, and the Dakotas. In 1914, the Kansas associations formed a regional grain marketing agency (Farmers Union



The Farmers Union played an important role in starting many of today's existing cooperatives. The State Farmers Union in Nebraska started a wholesale purchasing department in 1914 that resulted in a separate cooperative in 1919, the Farmers Union State Exchange, Omaha. Petroleum, with delivery to the farmers, is one of the main lines of business for this cooperative.

Jobbing Association, Kansas City, Mo.) to sell their members' grain on the terminal market.

Another successful enterprise was the Farmers Union Cooperative Creamery Co., Superior, Nebr., which was organized in 1917 and began operating in 1920.

The American Society of Equity

This general farm organization began in 1902 in southern Illinois. It sponsored many cooperative enterprises in the North Central States, principally in Wisconsin. Its first efforts were directed mainly to marketing livestock, grain, potatoes, and general produce. Many local cooperatives soon

began to handle production supplies. In Wisconsin, the American Society of Equity endeavored to serve as a broker or central agency for selling produce and purchasing supplies for its local exchanges. It also sponsored several livestock packing plants in 1913. Many of the local associations in the Midwest still carry Equity in their names.

Many Regionals Formed

Concentrated attempts were made to develop terminal marketing cooperatives from 1905 to 1910. A cooperative livestock commission company began operation on the Midwest terminal markets and an orange marketing association started in California in 1906.

Tobacco growers formed an association in Kentucky the following year, and western wool growers followed with a cooperative sales agency. Poultry and egg producers in New York and lima-bean growers in California formed central marketing associations in 1909. Almond growers in California began to sell products cooperatively in 1910.

The first major regional supply cooperative, Fruit Growers Supply Co., Los Angeles, Calif.—organized in 1907—obtained box shooks and orchard supplies for local packing units of California Fruit Growers Exchange, now Sunkist Growers, Inc.

During this period, several of the major cooperatives came into existence. Examples of these follow: The forerunner of Sun-Maid Raisin Growers Association, Fresno, Calif.; Farmers Union Jobbing Association, Kansas City, Mo.; California Walnut Growers Association, Los Angeles; Poultrymen's Cooperative Association, Riverside, Calif.; Dairymen's League Cooperative Association, New York City; and what is now the Western Farmers Association, Seattle, Wash.

The Ohio Wool Growers Cooperative Association, Columbus, started in 1918. The Maryland Tobacco Growers Association, Baltimore, began operations in 1917.

During the period from 1914 to 1920, several important regional production supply cooperatives were formed. As has been mentioned, the Farmers Union State Exchange, Omaha, Nebr., began handling general supplies for members in 1914, and the Farmers Union Live Stock Commission at Omaha began operations in 1917.

A group of local cooperative stores set up the Central Cooperative Wholesale (merged with Midland Cooperatives, Inc. Dec. 1, 1963) in Superior, Wis., in 1917.

The Eastern States Farmers Exchange, with headquarters in West Springfield, Mass., formed in 1918 to purchase feed, seed, fertilizer, and miscellaneous supplies for members in several States. In 1920, the Cooperative Grange League Federation Exchange, Inc. (G.L.F.) was established with headquarters in Ithaca, N.Y. (The latter two have merged to form Agway, Syracuse, N.Y.)

Other Developments

From 1900 to 1920, several other events stimulated the development of agricultural cooperation. In 1908, President Theodore Roosevelt created the Country Life Commission which took an interest in cooperatives. College professors turned their attention to the possibilities of farmer cooperation. A series of conferences on marketing and credit were held. New cooperative laws enacted in Wisconsin and Nebraska in 1911 influenced cooperative legislation in many other States.

President Woodrow Wilson in 1913 sent a commission to Europe to study cooperation and report its findings. As a result, credit cooperatives were organized which later proved to be the forerunners of the present cooperative Farm Credit System. In that year, also, the U.S. Department of Agriculture established an Office of Markets with a project in cooperative purchasing and marketing. The Smith-Lever Act, passed in 1914, provided for the extension system of the U.S. Department of Agri-

culture and the State agricultural colleges and resulted in increased emphasis on cooperatives.

The County and State Farm Bureaus were formed as agencies to promote agricultural extension work. Education in selling farm products and purchasing supplies was considered a part of the county agent's duties. The agents assisted in organizing many cooperatives.

By the end of the 1910-19 period, three strong types of cooperatives were dealing with marketing problems. These included federations of locals, centralized cooperatives, and terminal marketing cooperatives.

The first two national cooperatives were organized in this period. They were: The Cooperative League of the U.S.A., Chicago, Ill.,

organized in 1916 (page 83), and The National Milk Producers Federation, Washington, D.C., organized in 1916 (page 124).

Much of the growth of farmer cooperatives during the 1910-20 period was generated by their successful operations. The knowledge necessary to make such enterprises succeed had become widespread, and the air was filled with optimism. World War I stimulated food production, and rising prices for items bought by farmers increased interest in cooperative purchasing of supplies.

During the second decade of the 20th century, local cooperatives increased at a rapid rate. Nearly 7,000 marketing cooperatives and 1,300 supply cooperatives were organized.

Commodity Marketing Expands 1920-1933

EARLY in 1920, farmers accepted a new slogan, "orderly commodity marketing." It emphasized a development already underway and well described the fourth period in the history of agricultural cooperation. It was proposed that regional associations be created to handle the entire crop in important producing areas.

Original impetus to this movement was given at a meeting in Montgomery, Ala., in April 1920. A California lawyer, Aaron Sapiro, presented ideas that influenced the course of cooperative development through emphasis on commodity associations operating over extended areas.²¹ Up to this

time, the local association had usually received primary attention in building farmer cooperatives.

The Sapiro program contemplated State or regional single-commodity cooperatives, each controlling enough of its respective crop to be a decisive factor in determining prices. Following the Montgomery meeting, cooperative leaders proceeded to form State and regional associations for marketing cotton, tobacco, wheat, broomcorn, white potatoes, peanuts, rice, sweet potatoes, olives, alfalfa, milk, melons, and poultry. Farmers signed "ironclad" contracts providing for delivery of their crops to these new enterprises.

At the close of 1920, a total of 16 centrally controlled cooperatives

²¹ MONTGOMERY, R. H. *THE COOPERATIVE PATTERN IN COTTON*. 355 pp. MacMillan Co. New York, 1929. Ch. II.

had about 50,000 members. By 1925, the number had increased to 74 with some 880,000 members. Among the many cooperatives started during these days were 13 wheat pools. These associations generally operated over an entire State.

Not all the associations formed in the 1920's followed the Sapiro idea. Among those that did not was the Michigan Elevator Exchange, Lansing (1920), which began as a federation of local cooperatives to handle grain and dried beans.

Others included Minnesota Cooperative Creameries Associations, Inc., the forerunner of Land O'Lakes Creameries, Inc., Minneapolis, Minn., the Dairymen's League Cooperative Association, New York, N.Y., and what is now the Pacific Wool Growers, Portland, Oreg., all organized in 1921.

The American Farm Bureau Federation and its State and county affiliates stimulated organization of many cooperatives—many of them still bearing the Farm Bureau name. Here a group of young people tour one of these—The Farm Bureau Cooperative Association, Inc., Columbus, Ohio.

The Farm Bureau

Another major general farm organization that influenced and stimulated business cooperation among farmers was the American Farm Bureau Federation and its various State and county affiliates. Various State Farm Bureau federations formed the national organization in 1919. It was the 1920's however, before the Farm Bureau became active in cooperatives. It did this by setting up special committees of 13 to 21 members to prepare plans for cooperative marketing enterprises in the fields of livestock, grain, fruits and vegetables, and eggs.

As a result, several national organizations were established including the U.S. Grain Growers, Inc., Chicago, Ill., Federated Fruit and Vegetable Growers, Inc., Chi-



cago, and the National Livestock Producers Association, Chicago. The first two operated only a few years.

The American Farm Bureau Federation, in sponsoring the organization of cooperatives, frequently assumed expenses incurred before organization and furnished initial capital. The cooperatives usually repaid the money advanced for these expenses.

Farm Bureaus in various States also were interested in the cooperative purchase of production supplies for farmers. In 1921-23, those in Indiana, Ohio, and Mississippi pooled members' orders for carload shipments of items used in quantity.

Then in the mid-1920's, many countywide Farm Bureau supply associations were incorporated.

Within a short time, a number of statewide Farm Bureau wholesale cooperatives were organized to serve them. These cooperatives expanded operations, and many now provide marketing as well as production supplies and related services.

Other Supply Groups Appear

The use of petroleum products began to increase in the late 1920's with the coming of the farm tractor and truck. As a result numerous petroleum cooperatives were formed, and many marketing associations added petroleum departments. The cooperative that has now become Intermountain Farmers Association, Salt Lake City, Utah, was set up in 1923. The Farm Bureau, Farmers Union, and Grange sponsored many supply cooperatives in various States.

Others organized as independent local cooperatives. Four regional petroleum wholesale cooperatives were formed between 1926 and 1930.

The Minnesota Farmers Union purchased the Equity Cooperative Exchange at St. Paul, Minn., in 1922.

In 1925, the Farmers Union Terminal Association formed at St. Paul. This was the forerunner of the present Farmers Union Grain Terminal Association (G.T.A.), which began operations in 1938. The original terminal association set up a subsidiary in 1927 to market supplies. In 1931, this subsidiary was incorporated separately as the Farmers Union Central Exchange, St. Paul, Minn.

In the early 1930's, Nebraska reported about 100 Farmers Union cooperative stores; 100 oil associations; 200 elevators and cream stations, which also handled supplies; and about 50 Farmers Union locals buying supplies through secretaries or agents.

The influence of the Farmers Union on cooperatives, first mentioned in the previous section, has continued.

Various other cooperatives formed in the 1920's. Southern States Cooperative, Richmond, Va., organized originally as the Virginia Seed Service in 1923. The same year the farmers of Missouri, through their local exchanges, established the M. F. A. Milling Co., Springfield, to manufacture quality feeds at minimum costs.

National Organizations

During this period two national organizations appeared. They were the American Institute of Cooperation (AIC), Washington, D.C.



Signing of the Capper-Volstead Act of 1922. This Act is often referred to as the Magna Carta for farmer cooperatives.

(see page 79) and the National Council of Farmer Cooperatives, organized in 1929 (see page 81).

Legislative Benchmarks

Numerous contributions to the legal side of cooperative marketing were made during the 1920–29 period. Details on these legal aspects are given on page 14; but a brief discussion follows.

Legislators in most States accepted a standard cooperative act, the Bingham Act of Kentucky, in slightly modified forms. Three legislative acts of national concern to cooperatives were put on the books. The Capper-Volstead Act, passed in 1922, specifically sanctioned farmer cooperatives that met certain requirements.

In 1926, Congress passed the Co-operative Marketing Act, which provided for a division of cooperative marketing in the U.S. Department of Agriculture. This division later became the Farmer Cooperative Service. (See page 63.)

The Agricultural Marketing Act established the Federal Farm Board in 1929. A revolving fund of half a billion dollars also was authorized, which among other things, was to assist cooperatives. As a result, a number of new associations and stabilization corporations appeared—several with the word “national” in their names.

Examples included the National Livestock Marketing Association, Chicago, Ill.; the National Wool Marketing Corporation, Boston, Mass.; the American Cotton Co-operative Association, Memphis,

Tenn.; and the National Beet Growers Association, Denver, Colo.—all federations of regional or terminal marketing cooperatives.

The end of Farm Board activities marked the end of the rapid development of national commodity

cooperatives. Some went out of business because they could not live up to the high expectations that had been generated. They never controlled a sufficient portion of any product to exert a strong market influence.

Sound Business Emphasized 1933-1945

DURING the fifth period, a wide range of forces left their mark on farmer cooperatives. These included the economic depression, drought, new agricultural programs, and World War II. The results were rising demands for agricultural commodities; frequent shortages of many production supplies; and pronounced shifts to mechanized, scientific, and commercialized farming.

This period was one characterized by growth in volume of business and memberships and by increasing recognition of the importance of sound business practices. There was a trend toward more complex associations that provided broader services for members.

During this period, the number of large-scale organizations, as well as of bargaining associations, increased. More cooperatives began to combine marketing and purchasing operations.

Many cooperatives improved their financial situation and gave increased attention to processing farm products and manufacturing production supplies. They further recognized the growing importance of research and education and gave more thought to improving efficiency. Often cooperatives became pacesetters in serving farmers.

A few illustrations and high-

lights of these developments follow.

Finances Improved

An important event for farmer cooperatives in the early 1930's was legislation creating the Farm Credit Administration. As a result, a system of banks for cooperatives to make facility, operating, and commodity loans came into being. This legislation also resulted in the establishment of production credit associations to provide farmers with a cooperative system for short-term credit.

The banks for cooperatives have helped many associations throughout the country to get on a sounder financial basis. Not only did they provide dependable and economical lending services; their officials also advised many cooperatives on business and financial practices.

Establishment of the Rural Electrification Administration in 1935 encouraged and financially helped rural electric cooperatives to provide electricity and, at a later date, telephone service to rural communities.

Research and Educational Assistance Stressed

With the emphasis on sound business operations and finances, the need for research and educa-

tional assistance to farmer cooperatives was further recognized. Such work, begun by the U.S. Department of Agriculture in 1913, was strengthened and formalized in 1926 by the Cooperative Marketing Act. Starting in 1933, this program was carried on by the Cooperative Research and Service Division of the Farm Credit Administration.

This Division emphasized problems of management, organization, policies, financing, merchandising, costs, efficiency, quality, and membership relations. It advised officials of farmer cooperatives and worked with educational agencies, cooperatives, and others in disseminating information on cooperative principles and practices.

The Division's work in assisting farmers with their cooperative problems was a step in the direction of helping them with their marketing and buying problems and thus supplemented the long-time program of assistance on crop and livestock problems by other agencies of the U.S. Department of Agriculture and by the State experiment stations.

Somewhat similar research was underway at a number of Land-Grant colleges, and State extension services helped provide educational assistance. Some cooperatives, too, were setting up their own research departments to work on product testing and various production and economic problems.

Greater Emphasis on Processing

Farmer cooperatives began to increase the number of their marketing services between 1933 and 1945. Much of this was brought about by increased processing by fruit and



Farmers began to get power and electricity through their own rural electric cooperatives after the establishment of the Rural Electrification Administration in 1935.

vegetable, dairy, and poultry cooperatives.

Many production supply cooperatives undertook marketing, and many local cooperatives began to handle a wider line of supplies than just feed, seed, and fertilizer. As a consequence, farm supply regionals started to explore for crude oil and to refine petroleum products; to manufacture feed and fertilizer; and to handle such items as insecticides, veterinary supplies, and miscellaneous farm and home equipment.

Many supply cooperatives added services such as fertilizer and lime spreading, feed mixing, seed cleaning, and paint spraying. A number of both marketing and purchasing cooperatives also added

frozen food locker plant and local processing services.

Even before World War II, decentralization of livestock marketing brought more local slaughtering and processing. Six meat packing organizations were launched from 1930 to 1938.

World War II greatly stimulated cooperative processing of dried milk and dehydration of fruits and vegetables. The first cooperative sugar mill in the United States was established in 1932, and several others started after that time. Rice cooperatives began acquiring milling and drying facilities in the 1933-45 period.

Most of the cottonseed oil mills started after 1936, and all of the soybean oil mills were established after 1940 to help meet the critical shortage of protein feeds after World War II and to help improve returns to producers. Cooperative canning of fruits and vegetables continued to grow; and freezing, dehydration, and prepackaging

services were added. Some of these dehydration and processing plants later ceased operating, however, because of problems encountered in adjusting to changing market conditions. In 1940, the first cooperative to process and market broilers was organized. Cooperative wineries in California grew in importance.

The first cooperative petroleum refinery was built in 1939, and several more were soon acquired to help assure farmers adequate fuel supplies during the war period. Feed mills, fertilizer and insecticide plants, and box shook mills also were acquired during the 1933-45 period.

Modern Business Methods Adopted

The period 1933-45 saw increasing emphasis placed on managerial, employee, and director selection and training. Manager and employee compensation and incentive plans were accepted as a part

One of the earliest cooperative petroleum refineries was built in 1939 at Phillipsburg, Kans., by Consumers Cooperative Association. Shown here is a night view of its catalytic plant built in recent years.



of modern business practices. Departmentalizing of operations, membership and public relations, and operating efficiency also received more attention—especially from regional associations.

Continued growth in size of agricultural cooperatives and complexities of their operations, coupled with provisions of the Federal income tax statutes, also emphasized the need and importance of improving cooperative accounting and auditing services.

Many large centralized and federated types of cooperatives, whose activities extended into many fields, by necessity developed accounting systems for more effective operating controls and auditing services for member or branch affiliates.

Pioneer efforts in this direction were taken by such regional cooperatives as Cooperative G.L.F. Exchange, Inc., Ithaca, N.Y.;²² Southern States Cooperative, Inc., Richmond, Va.; Consumers Cooperative Association, Kansas City, Mo.; and Midland Cooperatives, Inc., Minneapolis, Minn.

Many other regional cooperatives also developed accounting and auditing departments to service their county and local association members. The Illinois Agricultural Association, Bloomington, Ill., for instance, has operated a separately incorporated Illinois Agricultural Auditing Association for many years. Participating members bought shares of stock in this association, and its services have been provided at cost.

Over the years most local cooperatives also have shown marked progress in their business records. The accounting and auditing services developed and provided by the regionals and other firms have been of substantial value in improving business and financial practices.

Two additional national cooperatives were organized during this period. They were:

The National Federation of Grain Cooperatives, Washington, D.C. (see page 174) organized in 1939, and the National Rural Electric Cooperative Association (NRECA), Washington, D.C., organized in 1942 (see page 324).

²² See footnote 20.

Adjustment to Change 1945-1963

FOLLOWING World War II tremendous shifts in the agricultural economy, coupled with changes in national and international relationships, brought cooperatives face to face with the necessity for making far-reaching adjustments in their operations, if they were to effectively serve farmers.

It is, of course, true that many of these adjustments had begun to appear in the previous period. However, following World War II these adjustments became especially significant.

Foremost among the developments taking place that reflect the changing focus of cooperative effort are: (1) Growing emphasis on economic integration, (2) increasing attention to coordination

and merger problems, (3) expanding education and research, (4) modernizing equipment and facilities, and (5) broadening business services.

These developments emphasized the need for cooperatives to continue their efforts:

1. To build stronger financial positions by integrating and further expanding into processing and manufacturing.

2. To improve business practices, management training, and employee development, thus giving greater attention to establishing modern methods of operation.

3. To give more attention to member and public relations as cooperatives become larger and more integrated and as a new generation of members appeared.

Integration Increases

Integration, of course, is not a new economic concept as far as cooperatives are concerned. In fact, most cooperative integration started as a form of horizontal integration when local associations providing similar services banded together into federations.

The same development occurred when large numbers of farmers formed centralized associations. These cooperatives, in turn, represented sufficient economic force to enable other cooperatives to undertake various vertically integrated activities.

For a number of years, then, many marketing and purchasing cooperatives, as well as some bargaining associations, have per-

Central Carolina Farmers Exchange, Durham, N.C., provides integrated services for members by supplying feed, poultry processing, merchandising, and transportation services. Shown is its modern poultry processing plant that dresses 6,000 birds an hour under Federal Poultry Inspection. Live poultry comes in one end of the building and the dressed birds are loaded out at the other. The plant employs about 175 people.



formed a wide variety of farm business services under one management. What is new in integration, however, is the increased emphasis on contractual arrangements that in varying ways tie together production, financing, processing, and marketing with the management function. The result is many completely new problems for cooperative management to cope with.

Many of these organizations have entered into a wide number of contractual arrangements with farmer producers. Others have expanded operations both horizontally and vertically to give farmers greater control over their farm operations.

Vertical integration by cooperatives has progressed rapidly. More than three-fourths of the feed, seed, fertilizer, and petroleum products that regional cooperatives furnish their locals are processed in cooperative plants. Many marketing cooperatives also are providing a growing number of processing and distribution services that help move farm products closer to eventual consumers.

Some outstanding cooperatives now provide almost completely integrated services for members' products. For example, a cooperative in Florida will buy land, clear, and plant it to citrus trees; provide care for the grove; harvest, pack or process the product; and then sell it for the member.

Another cooperative serving turkey producers in Utah has a breeder farm, a hatchery, a feed mill, a supply and equipment store, and a modern processing plant. It then sells members' turkeys through a national cooperative sales agency of which it is a member. A few other cooperatives provide similar

services for egg and broiler producers.

Recently a large regional cooperative began developing more completely integrated services for mid-western hog producers.

Consolidations and Mergers Occur

Consolidations and mergers of inefficient small cooperatives made progress especially in the dairy, fruit and vegetable, and production supplies fields. Many merged to get the advantage of larger volume, modern equipment, and more capable management. Information obtained by Farmer Cooperative Service indicated that during the 6-year period, 1957-62, about 325 cooperatives consolidated or merged.

Marked progress has been made in coordinating the efforts of both local and regional cooperatives. Some 10 or 12 area or national federations of regional supply cooperatives have been formed, mostly to manufacture certain farm supplies such as fertilizer, feed, or petroleum products. Poultry cooperatives in the Northeast federated to merchandise and sell better. Dry bean and pea farmers set up a national sales agency.

A significant development occurred among marketing cooperatives when National Grape Cooperative Association, Westfield, N.Y.—a centralized organization—was formed in 1949 and purchased facilities and brand name of Welch Grape Juice Company in the early 1950's.

Another important development has been the increasing number of bargaining cooperatives. This kind

of organization had been important in the dairy field for a number of years. About 25 of some 35 fruit and vegetable bargaining associations presently operating have been organized since World War II.

Marketing cooperatives also have taken steps to develop international markets for farm products. In 1958, Producers Export Company, New York, N.Y., was organized. This association, which represents 22 regional grain cooperatives, was set up to expand export markets for grain.

Similarly, Soy-Cot Sales, Inc., Chicago, Ill., an association of 18 cooperative oilseed processors, was established in 1962, to develop the export market for cottonseed and soybean products.

Along somewhat similar lines, Midstates Terminals, Inc., Toledo, Ohio, an association representing five midwestern grain regionals, was organized in 1949 and functions both in exporting and domestic trade. Several members of these two concerns also export grain and grain products for their own account.

Education and Research Expanded

An important development was the separation of the Cooperative Research and Service Division from the Farm Credit Administration. The Division was established as a separate agency, Farmer Cooperative Service, in 1953 to more directly identify the work of the U.S. Department of Agriculture with cooperatives. In 1961, this agency was grouped with other agencies in the Department to report to the Assistant Secretary in charge of the Conservation and Rural Development program.

Cooperative research at land-grant universities and State Extension Service activities have continued. Efforts of State Cooperative Councils, the American Institute of Cooperation, and The Cooperative League of the USA also have expanded and contributed to a better understanding of the role of cooperatives in the Nation's economy.

A number of conferences on cooperative research and teaching have been jointly sponsored by Farmer Cooperative Service, the American Institute of Cooperation, and land-grant universities. Some larger regional associations have added schools or education departments. Their efforts have stressed comprehensive training programs for various types of employees and directors.

A recent development in the international development of cooperation has been establishment of the International Cooperative Training Center at the University of Wisconsin. The Center is sponsored with funds from the Agency for International Development and has the guidance of an advisory board of representatives of principal cooperatives.

Cooperatives themselves recently have taken important steps in conducting research. A dozen regionals cooperatively share the expenses and results of five feed research and testing farms. Several regionals have formed a cooperative and hired a plant breeder to improve forage seed. Two legume seed marketing cooperatives in California have employed a plant breeder to develop improved varieties.

A few regional supply and marketing cooperatives have added



The 3rd National Research and Teaching Conference in Agricultural Cooperation was held at the University of Nebraska in 1962 for research extension, and teaching specialists on cooperatives from universities, cooperatives, Farm Credit Administration, and USDA. Sponsors of these conferences have been the Farmer Cooperative Service, the American Institute of Cooperation, and the universities.

small staffs to conduct market and other economic research studies, including occasional studies on membership relations and operating problems of their affiliated local cooperatives.

Facilities and Equipment Modernized

Farmer cooperatives have made much progress in modernizing their facilities, especially since World War II. They have built new plants and warehouses to better handle an increasing volume of business. In cooperative grain marketing, for example, one of the more significant developments was building storage elevators—both at local and terminal markets. These

enabled grain cooperatives to improve their merchandising services as they installed the latest design in grain storage elevators and in grain and rice drying equipment.

Cooperatives have been in the forefront in developing and strengthening new distribution systems for production supplies and farm products. These systems have grown out of changes in agriculture, particularly the development of large and highly mechanized farms.

Almost all cooperatives handling production supplies now have developed bulk delivery systems for feed and bulk spreading of fertilizer and lime. Many citrus cooperatives provide harvesting services

and have developed bulk hauling in place of traditional field boxes.

Petroleum refineries have been modernized continually to produce a higher proportion of fuels with higher octane ratings. Fertilizer plants are largely mechanized.

Many regionals also have installed laboratories to establish specifications for the products they want manufactured and then to test the quality of the final product.

Cooperatives also have replaced old transportation equipment with modern types. Tank trucks for delivering fuel to farms are equipped with mechanical unloading pumps and meters, and many have added dual pumping systems to prevent mixing of fuels.

Cooperative canning of fruits and vegetables has continued to grow and cooperatives have pioneered in freezing such products. They also have continued to make marked progress in prepackaging and merchandising. Development of cooperative wineries in California has grown in importance.

Idaho Potato Growers, Idaho Falls, now processes and markets french fries to expand members' outlets for potatoes.

Most of the cooperative cottonseed and all the cooperative soybean oil mills began operating after 1946. Plains Cotton Cooperative Association, Lubbock, Tex., has pioneered in the use of the assembly-line method to determine micronaire and color readings of cotton samples, handling as many as 22,000 bales in 24 hours. This additional information makes it possible to more closely meet mills' specific needs and enables the association to more effectively market the cotton of over 12,000 grower members.

Northwest Dairymen's Association, Seattle, has a staff of 30 technicians and field representatives to help producers maintain high-quality production.

Broad Services Added

Many cooperatives have continued to handle a wider variety of supplies and to market more kinds of farm products. They have provided additional services related to these supplies or products, as mentioned earlier. The rice, fruit and vegetable, and production supply cooperatives illustrate the shifts to diversified, across-the-board services to meet producer needs.

The early rice cooperatives functioned only as bargaining associations in selling members' rough rice to millers. Several rice cooperatives, in addition to drying and storing, have mills that husk, polish, enrich, and package rice (see page 227).

These rice cooperatives maintain extensive sales organizations, conduct nationwide advertising and sales promotion campaigns, handle farm supplies for members, cooperate in research programs designed to develop new varieties and to discover new uses, and even perform other services such as operating irrigation systems for members.

Fruit and vegetable associations also have added many marketing services for their members. These include grading, packing, marketing, merchandising, canning, freezing, drying fruits and vegetables, and concentrating frozen juices (see page 134).

Other fruit and vegetable associations negotiate contracts with processors for their members and set minimum prices for raw prod-

ucts. In addition they perform other services such as handling production and harvesting supplies for members, furnishing or arranging for short-term credit, performing grove caretaking and harvesting operations, and providing terminal facilities.

Other marketing cooperatives have added hauling, drying, and storing or warehousing services.

Some production supply cooperatives have marketing services for one or more products. Many have added insecticides, animal health products, liquid fertilizer, and liquefied gas to their line of supplies. Many cooperatives also now provide bulk feed delivery, feed grinding and mixing, soil testing, bulk blending and custom spreading of lime and fertilizer, seed processing and the like. During this same period, more attention has been given to increasing the range of cooperative services. For instance, established cooperatives, or in some instances, separate associations are examining the cooperative technique for forestry management and marketing associations, grazing cooperatives, recreation, senior citizens housing, and a related range of other services of interest to rural people.

The period 1945-63 was one of substantial cooperative growth. The net volume of yearly business

increased by about 50 percent, or from \$8 billion in 1945 to \$13 billion in 1962. While the number of marketing and purchasing associations declined from approximately 10,000 to 9,039, total memberships increased from 5 million to more than 7 million. The decline in numbers reflects a tendency toward consolidation and combination of cooperatives, especially among the smaller ones.

Information obtained by Farmer Cooperative Service indicates that, in general, the business of marketing cooperatives has increased faster than total income from the sale of all farm products. This is especially true for dairy, grain, and cotton associations.

Likewise, the proportion of production supplies handled by cooperatives has increased faster than total expenditures of farmers for these items—particularly for petroleum products, fertilizer, and miscellaneous equipment and supplies. At the same time, cooperatives have continued to provide an increasing proportion of most of the services modern farm operations require.

All things considered, cooperatives as a group have continued to be in the forefront in helping members adjust to the changing economic and social conditions occurring in rural communities.

Farmers Make Wide Use of Cooperatives

by Anne L. Gessner

Chief, History and Statistics Branch

OVER the years, statistics on farmer cooperatives have provided a measure of the extent to which farmers have used cooperatives to improve their economic position.

Earliest statistics compiled on cooperatives about 1863 covered the operations of 35 cooperative cheese factories. By 1900 there were about 1,000 farmer cooperatives.

First Survey in 1913

THE first nationwide survey of farmer cooperatives was begun in 1913 and continued through 1915. Final tabulations developed from this survey, after culling for duplicates and eliminating noncooperatives, included 5,424 cooperatives. It was estimated that these 5,424 cooperatives had some 651,000 memberships and a total business volume of about \$636 million in 1915.

The second nationwide survey of farmer cooperatives was undertaken in 1919 as a part of the agricultural census conducted by the Bureau of the Census. The Census data gave the number of farms that reported cooperative selling or purchasing as 624,527. Sales through farmers' marketing organizations reported by 511,383 farms amounted to almost \$722 million, and purchases through cooperatives by 329,449 farms amounted to about \$85 million.

Early in 1922 the Department began its third nationwide survey of cooperative buying and selling. After a 2-year sifting process to eliminate duplication, the Department by March 1924 had obtained information on 10,160 active organizations.

During the 1922-26 period, the Division of Agricultural Cooperation, under the Bureau of Agricul-

tural Economics, began, for the first time, to collect data on the numbers, memberships, and volumes of business of marketing and purchasing cooperatives on an annual basis.

In the early 1920's these statistics reflected the development of "large-scale" organizations operating over an entire producing section or even an entire State. By the end of 1925, out of the 10,803 associations listed with the Department, almost 200 were classified as such "large-scale" associations.

Beginning with the 1929-30 survey, statistics on farmer cooperatives have been published each year. The 1929-30 survey indicated there were 12,000 marketing and purchasing cooperatives, with an estimated 3.1 million memberships and a business volume of \$2.5 billion.

The 1936-37 survey was a joint effort by the Farm Credit Administration, 12 district banks for cooperatives, and 33 agricultural colleges. This represented the only "door-to-door" nationwide survey of farmer cooperatives made in the United States and served as the benchmark for later surveys. The 10,743 cooperatives included in this survey reported 3.3 million memberships and a total business volume of \$2.2 billion.

Surveys Showed Trends

DURING the decade of the 1930's, the statistics reflected material progress on the part of farmer cooperatives. Dollar volume rose from a low of \$1.3 billion in 1932-33 to \$2.3 billion in 1940-41. This total, however, was still below the

\$2.5 billion reported for 1929-30. Memberships had increased to 3.4 million, but the number of associations was down to 10,600.

Statistics in the 1940's reflected the impact of the war years. They indicated the development of co-

operative plants for manufacturing powdered milk, producing dehydrated foods, and performing other types of processing required by the war emergency.

In the postwar years and during the remainder of the decade, memberships and business volume of farmer cooperatives continued to increase while the number decreased slightly.

Reporting Improved

Beginning with the 1950-51 survey, extensive changes were made in collecting and analyzing cooperative statistics. These changes were initiated to provide more accurate data on the individual categories of farm products marketed and farm supplies purchased and on the services performed in handling these commodities.

An important change introduced in these statistics in 1950-51 was the development of a questionnaire adapted to regional cooperatives. It provided for allocation of the dollar business volume of each regional association to the States in which the business originated, rather than crediting all of an association's business to the State in which the regional maintained its central office as had formerly been done. Similar adjustments were also provided for membership figures. Equally important was the provision for reporting on the amount of business done between cooperatives. These major revisions resulted in increased use of the statistics.

Latest Picture of Cooperatives

Latest statistics available for the 1961-62 fiscal year show 9,039 marketing, farm supply, and related

service cooperatives with memberships of 7.1 million (appendix table 1, page 334). Because many farmers belong to more than one cooperative, there is some duplication in these membership figures.

Figure 2 shows that memberships in these cooperatives reached their high point in 1955-56, totaling 7.7 million. Since then, the relatively small but rather steady decrease in number of memberships has been largely caused by the decline in total number of farmers.

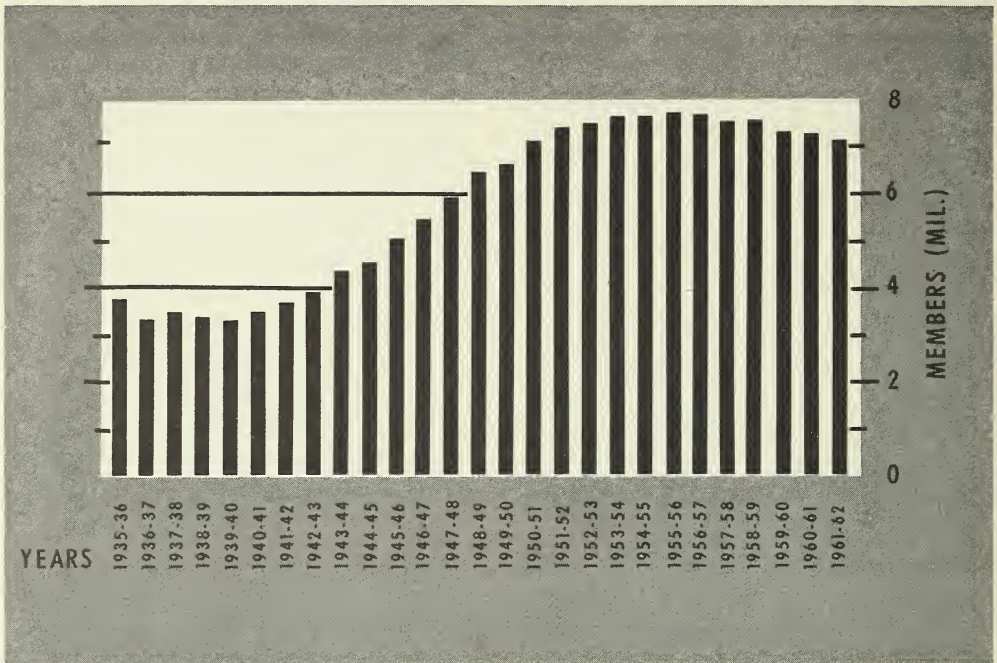
The estimated volume of business farmers handled through marketing, farm supply, and related service cooperatives had a gross value of \$17.2 billion in the 1961-62 fiscal year (fig. 3). The net volume, after duplication because of interassociation transactions was eliminated, amounted to \$13 billion (appendix table 2, page 346). This \$13 billion is 60 percent greater than the total net volume of \$8.1 billion reported in 1950-51. The 1950-51 survey was the first in the revised statistical series in which cooperatives were asked to report on each of the major commodity groups they handle.

The total number of these cooperatives was down to 9,039 in 1961-62 compared with the high point in 1929-30 when they numbered 12,000. Since then, there has been a rather steady reduction in the number of these cooperatives. Reorganizations involving mergers, consolidations, and acquisitions have had an important influence on this downward trend in total number of cooperatives.

Size of Cooperative Business

The size of business of these marketing, farm supply, and related service cooperatives, like that of other business groups in our econo-

Figure 2.—Estimated memberships in farmer marketing, farm supply, and related service cooperatives, 1935-36 to 1961-62.



my, is getting larger. Nevertheless, most of these cooperatives are still relatively small.

An analysis of size of cooperative business based on the 1961-62 survey indicated that almost 27 percent of these cooperatives had a business volume of over \$1 million in 1961-62, or about 7.5 percent more cooperatives were in this group than in 1955-56.

Business volumes of 2.6 percent of these associations were in the \$10-million-or-more class compared with 1.7 percent in 1955-56. In this group, 1.4 percent had business volumes of \$20 million and over in 1961-62, while 1.0 percent were in this top classification in 1955-56.

Slightly more than 35 percent of the marketing associations had business volumes of \$1 million or more, compared with 25 percent in this group in 1955-56. More than

14 percent of the farm supply cooperatives had business volumes of \$1 million or more. This is about 5 percent more in this group than there were in 1955-56.²³

Dairy First in Marketing

A comparison of the value of the major commodity groups handled cooperatively indicates that dairy products, with a net value of more than \$3.4 billion, accounted for 34 percent of the total net value of farm products marketed by cooperatives in 1961-62. The net value of dairy products handled by cooperatives has increased 77 percent since 1950-51 when it amounted to \$1.9 billion.

²³ A detailed analysis of size of business was published in the article "Size of Cooperative Business Continues To Increase," News For Farmer Cooperatives, Farmer Cooperative Serv., U.S. Dept. of Agr., April 1964, available as News Reprint 278.

Grain, including soybeans and soybean products, remained in second place, with a net value of \$2.2 billion—60 percent over the \$1.4 billion net grain volume reported in 1950-51. This commodity group accounted for 21 percent of the total net value of farm products marketed by cooperatives in 1961-62.

Livestock and livestock products—showing an increase in 1961-62 for the first time since 1958-59—were still in third place with a net value of \$1.5 billion. This was an increase of 15 percent over the \$1.3 billion net value of such products handled by cooperatives in 1950-51. This commodity group accounted for 15 percent of the total net value of farm products marketed by cooperatives in 1961-62.

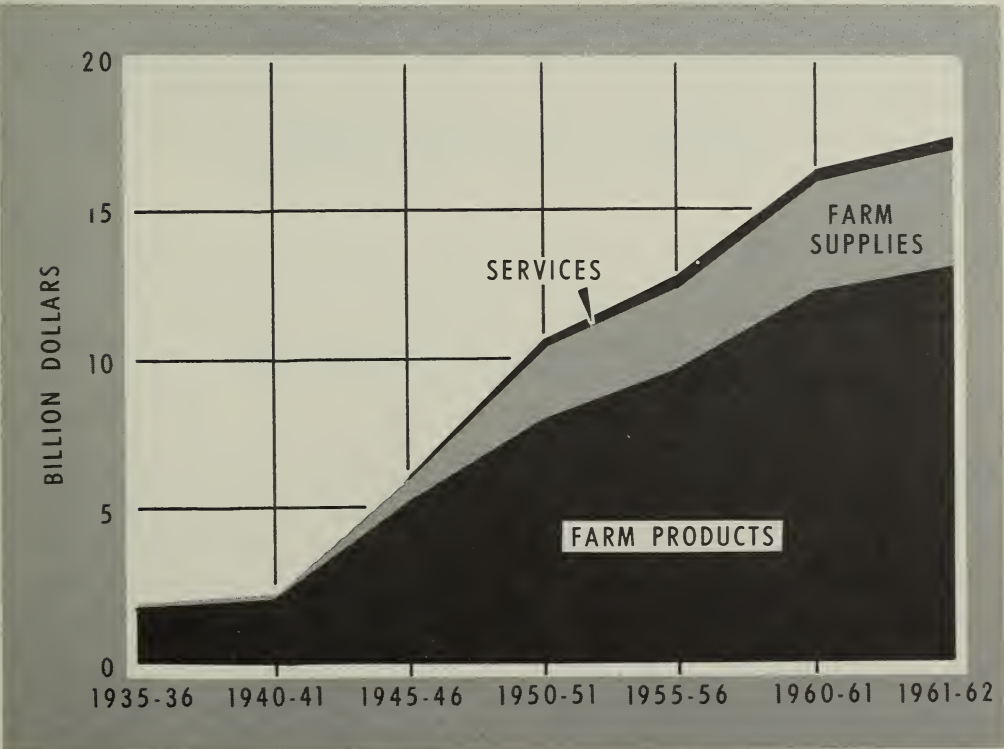
Feed Leads Supply Business

The gross value of all production supplies handled by cooperatives in 1961-62, including business between cooperatives, amounted to \$3.9 billion. The net value of these supplies, excluding such interassociation business, amounted to \$2.6 billion. This was an increase of 52 percent over the \$1.7 billion of such supplies handled in 1950-51.

Feed accounted for 36 percent of the total net value of farm supplies handled by cooperatives and amounted to \$936 million. This was an increase of 35 percent over the cooperative feed volume of \$695 million in 1950-51.

Petroleum products, second in importance among production supplies handled by cooperatives,

Figure 3.—Business volume¹ of cooperatives, 1935-36 to 1961-62.



¹ Includes business between cooperatives.

amounted to \$625 million and accounted for 24 percent of the total net value of such supplies handled. This was 65 percent over the comparable volume of \$377 million in 1950-51.

Fertilizer, in third place, accounted for 15 percent of the total net supply business of cooperatives in 1961-62 and amounted to \$387 million. This was more than double the 1950-51 volume of \$156 million.

Minnesota Has Most Cooperatives

Minnesota continued in first place in total number of cooperatives in 1961-62 with 1,148 associations. Wisconsin was second with 675 and Iowa was third with 607.

Minnesota also continued in first place in total number of memberships with 600,125. Illinois remained in second place with 456,570, and Missouri moved into third place with 435,500.

California continued to hold first place in the net value of combined marketing, farm supply, and service volume with \$1.37 billion, representing more than 10 percent of

the total net business volume of all cooperatives. Minnesota continued in second place with \$926 million, or 7 percent of the total. Iowa remained in third place with \$726 million, almost 6 percent of the total. Illinois stayed in fourth place with almost \$700 million, accounting for more than 5 percent of the total.

California also led in the net value of farm products marketed by cooperatives in 1961-62 with \$1.24 billion. Minnesota continued in second place with \$743 million. Wisconsin stayed in third place with \$552 million, followed closely by Illinois with \$550 million.

Iowa remained in first place in net value of supplies handled by cooperatives in 1961-62 with \$188 million. Minnesota moved into second place with \$166 million, and New York dropped to third place with \$160 million.

Texas continued to rank first in total receipts for services with almost \$45 million. Kansas moved into second place with \$30.3 million, followed closely by California with \$30.2 million.

Growth Trends Compared

A STUDY of growth trends of cooperatives between 1950 and 1961 provided information on the relative importance of these marketing, farm supply, and related service cooperatives. Based on the 11-year average of net values (excluding intercooperative business) of products marketed cooperatively, the index of cooperative mar-

ketings rose rather steadily from 79.7 in 1950-51 to 120.8 in 1960-61. In the same period, the index of cash receipts of all farmers based on an 11-year average, increased in lesser degree—from 91.5 to 108.1, with numerous deviations.

A comparison was made of the annual indexes for net values of products marketed cooperatively,

cash receipts from marketings of all farmers, and the gross national product. It showed that since 1954-55 the trend for indexes of cooperative marketings is located, with the slight exception in 1958-59, between the indexes of gross national product and of cash receipts of all farmers from their marketings. This is a reversal of the positions of the three series of indexes before 1954 and indicates a growth trend distinctly favorable to cooperative marketing in the agricultural sector of our economy.

The index for net values of farm supplies and equipment obtained through cooperatives, based on an 11-year average, rose steadily from 79.7 in 1950-51 to 117.0 in 1960-61. In the same period the index of cash expenditures of all farmers increased, with numerous deviations and within a narrower range, from 100.5 in 1951 to the high

point of 109.3 in 1959 and then declined to 108.3 in 1961.

A comparison was made of the annual indexes of supplies and equipment handled cooperatively, total cash expenditures of all farmers for supplies and equipment, and gross national product. It showed that since 1954-55 the indexes of the net value of farm supplies and equipment handled by cooperatives have been located between the indexes for the gross national product and the indexes for cash expenditures of all farmers. Thus, since 1954-55, the net value of farm supplies and equipment handled by cooperatives has increased at a relatively faster rate than total cash expenditures of all farmers for supplies and equipment, but at a slower rate than the gross national product. This indicates a rate of growth definitely favorable to cooperatives.

Other Services Provided

FARMERS cooperatively provided themselves with many other services in addition to those related to marketing their farm products and handling their farm supplies (appendix table 3, page 374). About 3.5 million of them were protected against fire, windstorm, or hail through some 1,500 mutual insurance companies.

Approximately 161,000 farmers got water for their land through 7,729 mutual irrigation companies in 1959. A total of 912 rural electrification cooperatives served more than 4.8 million farm homes in 1963. Thousands of farmers

received telephone service through mutual companies.

Farmers have also turned to cooperatives for financing their operations. In 1963, they obtained both long-term and short-term credit through 763 Federal land bank associations, 484 production credit associations, and 682 rural credit unions. Many of the cooperatives owned by these farmers also obtained credit through the 13 banks for cooperatives.

In addition, farmers use cooperatives for such services, as dairy-cattle artificial breeding and dairy-herd improvement.

National Organizations Serve Cooperatives

by Irwin W. Rust
Chief, Membership Relations Branch

EARLY in the development of farmer cooperatives, alert leaders realized many problems extended beyond the sphere of activity of individual associations. Just as single farmers found advantages in group action, so associations of farmers could work together.

Cooperative leaders soon realized, also, that responsibility for

informing the general public about the economic value of cooperation—beyond the information provided by Federal and State educational institutions—rested primarily upon the cooperatives themselves. Cooperatives have approached this problem in several ways, depending upon their opportunities to render service.

Early Organizations Appear

REPRESENTATIVES of farmer cooperatives have fostered and advanced cooperative development through State and national associations or councils for more than 50 years. A State association to promote the interests of farmers' elevators was formed at Springfield, Ill., in 1903. This action was followed by setting up similar associations in other grain producing States. Six of these State associations met at Minneapolis in June 1912 and organized the National Council of Farmers Cooperative Associations.

One of the early presidents of the Council set forth its activities as follows:

"All matters of interstate or national importance are handled by the National Council. Its officers have made several trips to Washington, D.C., to urge, and assist as far as possible, in securing the

enactment of legislation, and preventing the enactment of unfavorable legislation, to appear before the Interstate Commerce Commission on behalf of the elevator companies, when necessary; and on several occasions we have carried our troubles to the Secretary of Agriculture. We opposed, to the very extent of our power, the efforts of the railroads to advance rates on grain. Our efforts were successful and this alone has saved the farmers millions of dollars."

This early National Council was primarily interested in the welfare of farmers' elevators, since associations of grain elevators were the most important segment of cooperative development at that time. At the annual convention of the National Council at Chicago in March 1920, the name of the association was changed to the Farmers National Grain Dealers Associa-

tion. This national no longer exists. It was replaced by an entirely new organization, the National

Federation of Grain Cooperatives, Washington, D.C., in February 1939.

Marketing Delegates Form Council

A 3-day conference held in Washington, D.C., in December 1922, drew marketing association delegates and visitors from 30 States and also from Canada and Denmark.

Active at the conference were representatives from cooperatives marketing such products as cotton, fruits and vegetables, tobacco, dairy products, grain, rice, livestock and nuts. Delegates from the American Farm Bureau Federation and the Farmers Educational and Cooperative Union of America also were present.

A unanimous vote on the last day of this national gathering of cooperating farmers created the National Council of Farmers' Cooperative Marketing Associations. The Conference chose an executive committee of 15 and charged them to set up the new organization. It selected a secretary and opened an office in Washington, D.C.

The executive committee worked out and signed an organization agreement. The council's purposes

were: (1) To establish contacts between cooperatives, (2) to supply crop information, (3) to develop national publicity, (4) to establish Federal contact for members, (5) to assist in legislative problems, and (6) to supply to farm groups reliable information.

This organization held annual conferences in Washington, D.C., in 1924, 1925, and 1926. Strong differences of opinion marked the 1926 conference. Progress had been made during that year but some member cooperatives had not fared well. They had expected cooperative commodity marketing to bring prosperity to farmers despite unfavorable economic conditions. But even cooperation was unable to accomplish the impossible, and financial support for the Council program dwindled.

At a meeting of the executive committee held in Chicago on October 21, 1926, the chairman reported suspension of the National Council of Farmers Cooperative Associations as of July 20.

National Cooperative Organizations Form

ABOUT the time this first National Council suspended operations, two dynamic new national associations appeared on the cooperative scene. Both still operate. They have headquarters in the Nation's Capital and devote their efforts to improving the economic

situation of the Nation's farmers.

American Institute of Cooperation

The American Institute of Cooperation (AIC), was incorporated on January 22, 1925, under the laws of the District of Columbia



Representatives of the six national cooperative organizations serve on the Cooperative Advisory Committee to the Department of Agriculture. The Committee set up in 1961 by Secretary of Agriculture Freeman—fourth from left—was composed of, from the left, Clyde T. Ellis, General Manager, National Rural Electric Cooperative Association; Jerry Voorhis, Executive Director, The Cooperative League of the USA; J. K. Stern, President, American Institute of Cooperation; Secretary Freeman; Kenneth Naden, Secretary, National Council of Farmer Cooperatives; Roy T. Hendrickson, Executive Secretary, National Federation of Grain Cooperatives; and E. M. Norton, Secretary, National Milk Producers Federation.

On March 13, 1945, it was reincorporated under the laws of the Commonwealth of Pennsylvania. The purpose of the present organization is "to promote research and disseminate information relating to the science of cooperation with particular reference to the economic, sociological, and legal phases." Its headquarters are in Washington, D.C.

AIC held its first session in Philadelphia July 20, 1925, in cooperation with the University of Pennsylvania. It continued for 4 weeks with courses in cooperation as a special feature. These courses

with outstanding teachers as instructors continued to be a special feature. Those who completed the courses were given credits acceptable toward college or university degrees.

Succeeding summer sessions have been held on land-grant college campuses throughout the country.

Early AIC sessions were gradually shortened and since 1950 have been 4 days each. These shorter sessions are preceded (or followed) by research and Extension Service workshops; meetings for State Council secretaries or cooperative educational directors;

and similar special gatherings to hear cooperative leaders from all parts of the Nation. Proceedings of the various annual sessions have been published as yearbooks under the title, "American Cooperation."

The Institute serves as a clearinghouse for information and as a means of contact among co-operators, educators, business and professional groups, and State and Federal officials.

AIC works with educational leaders of elementary schools, high schools, and vocational agriculture to provide better opportunities for students to learn about cooperation—its advantages, its possibilities, and its limitations.

In response to a definite demand, the Institute supplies speakers for cooperative meetings of both adults and youths. It assembles and makes available materials for talks and lectures. The Institute places emphasis on small meetings with outstanding leaders in agriculture, education, business, and religion participating in roundtable discussions.

Since 1958, it has sponsored, together with Farmer Cooperative Service, a series of annual regional conferences on cooperative member relations. These meetings, lasting 3 days, are attended by leaders interested in developing new and better ways to keep members and the general public fully informed about farmer cooperatives. In 1964, about three-fourths of all farmer cooperatives in the United States were represented at these conferences, either directly or through their regional affiliations.

The Institute is one of the primary sources for disseminating information on cooperatives. One of its most important functions is

the stimulation of research and educational work on agricultural cooperation. It has a particularly active program among farm youth.

The Institute advises officials on their operating problems in an effort to help them improve their services to their members.

National Council of Farmer Cooperatives

At the 1929 midsummer meeting of the American Institute of Cooperation held at the University of Louisiana, Baton Rouge, cooperative leaders created a new organization known as the National Chamber of Agricultural Cooperatives.

In December 1929, at a meeting of the organizing board of directors in Chicago, the name was changed to National Cooperative Council. This name was retained until the annual meeting in 1940, when it was changed to National Council of Farmer Cooperatives.

The organization in 1929 decided to establish a Washington office. In its first year, the Council listed as members 18 well-known cooperatives.

Objectives of the National Council of Farmer Cooperatives have been stated as follows:

1. To promote actively and persistently the interests of farmer cooperatives.

2. To impress on various Government and other agencies the importance, value, and potentialities of the cooperatives in agriculture.

3. To provide an avenue through which cooperatives may be quickly advised of current developments significant to them.

4. To serve as a forum or conference body through which better

understanding and bonds of friendship may develop.

Since the present National Council was organized in 1929, the number of members has increased from fewer than 20 to 125 direct and associate members in 1964. Most of these member organizations are federated associations which serve as central agencies for smaller local cooperatives. Thus through its affiliates the National Council represents some 5,000 cooperatives which serve about 3.75 million farmer memberships throughout the Nation.

The National Council of Farmer Cooperatives' service to its members is focused on representing farmer cooperatives before the Congress and executive and administrative agencies of the Government which handle matters affecting agriculture. Its goal is to maintain and improve relationships of farmer cooperatives with business, labor and the general public. The Council actively seeks opportunities to join with other agricultural, business and commodity groups in developing and putting into effect policies in the interest of agriculture.

Regular membership meetings of the Council are held each January and are attended by farm and cooperative leaders from all parts of the Nation. Primary purpose of the annual meeting is to formulate Council policy on a wide range of developments and matters of significance to farmer cooperatives and their members. Policy positions adopted at the annual meetings together with existing policies currently in effect, represent total Council policy and provide the framework within which the Council operates. Between annual meet-

ings, activities of the Council are conducted largely by the staff of its Washington, D.C., headquarters.

Officials of the National Council of Farmer Cooperatives frequently participate as members of United States delegations during international negotiations and conferences relating to economic and trade matters. Council representatives also serve as members of numerous advisory commissions and boards established by Government or private agencies to develop policy recommendations.

The Council is an active member of the International Federation of Agricultural Producers, a worldwide federation of nongovernmental farm and cooperative organizations, with 46 members in 32 countries.

The State Councils Division is the connecting link between the National Council and State councils of farmer cooperatives (see page 84).

At the annual meeting each year, voting members of the Council review the economic situation, modify existing policies, and formulate new policies. The program for the new year is usually presented in the form of resolutions. These definitely indicate the Council's position on subjects uppermost in the minds of farmers.

The National Council issues several publications. Among these, the *Blue Book*, issued early in the year, carries current information about the Council, its officers, members, and the program for ensuing months. This official yearbook has appeared regularly since 1935.

The National Council also issues, to members and the general public, a mimeographed biweekly letter entitled *Washington Situation*.

This provides a general information service. From time to time, the Council issues special publications and news releases on matters of current importance.

The Cooperative League of the U.S.A.

The Cooperative League of the U.S.A. is a national federation of all types of cooperatives—their activities ranging from farmers' marketing and purchasing to credit unions, rural electric, consumer goods, health, housing, insurance, and others. The Cooperative League was established in 1916. This makes it the oldest of the national organizations.

The Cooperative League has six major functions—to advance public understanding of cooperatives so they may multiply and develop, to help cooperative directors and officials improve their skills, to encourage them in wise finance and operating policies, to help them strengthen their member relations, to seek Federal laws and administrative decisions consonant with cooperative aims and purposes, and to encourage the world's people, through cooperatives, to help themselves.

The Cooperative League's headquarters are in Chicago. It also has offices in Washington, D.C. Its Cooperative News Service has 120 subscribing publications with a combined circulation of 3.5 million. It sends news about cooperatives each week to 275 newspaper editors and 375 radio newsmen at their request. It produces films seen by a half-million television viewers each month.

The Cooperative League publishes and distributes leaflets and

pamphlets that explain cooperative aims and practices to legislators, vocational agriculture students, churchmen, and other groups. Its staff prepares articles and material for encyclopedias, national magazines, radio and television shows and big city dailies.

The Cooperative League has taken an active interest in helping people in the emerging countries strengthen their cooperatives. It has men at work in southeast Asia, Africa, and Latin America. They train cooperative leaders and workers and introduce techniques to improve living standards.

The League, its members, and other national cooperative groups were active supporters in the development and progress of Wisconsin's International Cooperative Training Center. The League has helped finance the Caribbean Cooperative Confederation and the Organization of Cooperatives in America.

The Cooperative League trained two groups of Peace Corps volunteers to organize cooperatives in Columbia and Panama and in 1964 was planning for a group to work in Peru. With grants from the Agency for International Development, it helps organize national cooperative federations elsewhere. It has prepared photographic exhibits and radio tapes for the U.S. Information Agency to use overseas, and its movies and publications have been translated into nearly a score of languages.

To help cooperative leaders improve their skills, the Cooperative League conducts a number of professional conferences and publishes a magazine, *Co-op Report*, 10 times a year.

National Commodity or Service Organizations

In addition to these national organizations representing all types of cooperatives, many of the associations handling one particular product have joined together into national organizations. These are discussed in the commodity or service sections of this bulletin that relate to the cooperatives these organizations serve.

Among these are: National Milk Producers' Federation, Washington, D.C. (see page 124); National Federation of Grain Cooperatives, Washington, D.C. (see page 174); National Live Stock Producers Association, Chicago, Ill. (see page 178); National Telephone Cooperative Association, Washington, D.C. (see page 327); and National Rural Electric Cooperative Association, Washington, D.C. (see page 324).

State Councils Organize

FARMER cooperatives gain certain advantages from coordinating their efforts and setting up overall organizations. In this way, they are able to solve mutual problems and increase the benefits of agricultural cooperation. These organizations also provide a point of contact for official, public, and private agencies which deal with agriculture.

The first steps toward organizing State councils of farmer cooperatives were taken a little more than a third of a century ago.²⁴ By 1963, the cooperatives of 35 States were operating some type of statewide organizations.

Most of these organizations bear the term "council," "association," or "federation" in their titles.

One State, Wisconsin, has two organizations—Wisconsin Council of Agriculture Cooperative and the Wisconsin Association of Cooperatives.

Among the earliest councils set up were those in California, Oregon, and Wisconsin. The Agricultural Legislative Committee of California was formed in 1919, and in 1933 became the Agricultural Council of California. The Agricultural Cooperative Council of Oregon was organized in 1921.

These State cooperative councils sponsor programs of varying scope, ranging from a periodical newsletter to an annual series of manager and director training conferences. A number of them have one or more full-time employees. Others carry on their programs with a part-time secretary, usually one of the specialists on the staff of the State Agricultural Extension Service.

Early State cooperative councils were concerned largely with legislative problems. But as cooperatives increased in number and importance, leaders saw the need for developing smooth working relationships among themselves and with other organizations. Thus, the State councils have been enlarging their memberships, providing more adequate budgets, and

²⁴HECKMAN, JOHN H., AND SCEARCE, JANE L. THE WORK OF STATE COOPERATIVE COUNCILS. Gen. Rep. 26, Farmer Cooperative Serv., U.S. Dept. Agr. 1956.

expanding their programs. In 1964, the objectives of State councils and associations of farmer cooperatives could be summarized briefly as follows:

1. To promote and foster the welfare of farmer cooperatives by bringing their leaders together for study, discussion, and solution of their mutual problems.

2. To assist and encourage organization of farmer cooperatives in every field where needed.

3. To gather and disseminate information pertaining to development of farmer cooperatives, their functions, their obligations, and their contribution to the welfare of the American people.

4. To sponsor and support constructive legislation that will be helpful to farmers and to farmer cooperatives and to oppose measures that might be unfavorable.

5. To assist farmer cooperatives, Federal and State agencies, extension and vocational groups, colleges, State departments of agriculture, and other agencies in promoting appropriate educational programs.

State councils and associations of cooperatives have similar objectives, and differ only in methods of functioning. Some limit their membership to farmer cooperative business associations, whereas others include general farm organizations. Several limit their membership to statewide or federated cooperatives. A few have direct members only. A majority have provisions for associate or advisory members.

State councils differ considerably in their methods of financing their activities. Some carry on broad programs, have rather large budg-



The secretaries of the State associations of farmer cooperatives—usually called councils or associations—meet for a luncheon each year at the annual conference of the American Institute of Cooperation.

ets, and maintain year-round staffs. Others have limited budgets but maintain close working relationships with extension services, educational agencies, or farm organizations, upon which they depend for assistance in their work.

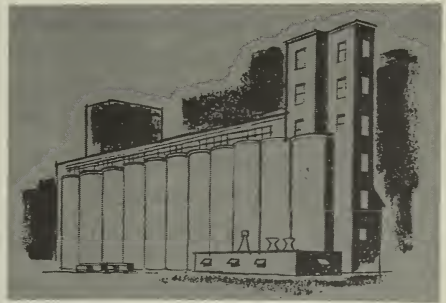
To keep in touch with each other in matters of national scope, most

councils have become associate members of the National Council of Farmer Cooperatives and direct members of the American Institute of Cooperation.

In a few States, county councils have been set up to promote various interests of cooperatives in the counties.



MARKETING COOPERATIVES



Farmers Market Cooperatively

by J. K. Samuels
Director, Marketing Division

FARMER cooperatives are important in marketing food and fiber in the United States. In 1964, they handled at some stage in the marketing process approximately 25 to 30 percent of the total output of agricultural products.

The percentage of specific products varies widely. For example, cooperatives market 90 percent of the lemons but less than 15 percent of the vegetables. Cooperatives now market 60 percent of our dairy products and 40 percent of our grain.

The term marketing generally includes the various functions or services essential in transferring goods from the producer to the consumer. The more important of these functions are assembling, grading, standardizing, packaging, transporting, storing, financing, risk-taking, processing, merchandising, and selling.

Marketing cooperatives usually specialize in certain marketing functions. An association may perform only one of those just mentioned, but usually several are involved. The present tendency is for associations to increase the number of marketing services performed for their members. Some cooperatives now perform all the services necessary in getting products from farmer to consumer.

Farmers have formed many cooperatives to provide themselves a marketing service not otherwise available. This move by farmers brought new businesses into the community.

Cooperatives have pioneered in paying producers on the basis of grade and quality, thus giving the farmer an incentive to grow better crops and livestock. This, in turn, has made available improved products for consumers. Such a chain of events has often created increased demand and brought more money back to the producing area.

Marketing cooperatives in general have sought to widen the market for their members. By bringing together large volumes of uniformly graded and processed products, many cooperatives can sell under their own brands and effectively merchandise and advertise.

Sunkist oranges and lemons, Land O'Lakes butter, Ocean Spray cranberries, Sun-Maid raisins, Sun-sweet prunes, Norbest turkeys, Rockingham poultry and meat, Donald Duck orange juice, Welch grapejuice, and Sioux Bee honey are illustrative of cooperative brands.

Cooperatives have also moved a lot of our farm products through the export trade. For example, the Florida Citrus Exchange, Tampa,

exports citrus fruits; Apple Growers, Inc., Hood River, Oreg., deciduous fruits; the Rockingham Poultry Marketing Cooperative, Broadway, Va., and Cotton Producers, Atlanta, Ga., are shipping out substantial quantities of processed poultry; and Producers Export Co., New York City, exports grain for its cooperative elevator members.

Large commodity associations were formed with highly centralized control. These served farmers of producing regions or large subdivisions of such regions. Some have withstood the test of time, but many were shortlived because they could not measure up to expectations.

Since the period of the 1920's, marketing cooperatives have concentrated on developing efficient operations and effective merchandising and sales activities. They have diversified operations, coordinated sales for efficiency and bargaining strength, and provided additional services to producers. As a result, marketing cooperatives have grown steadily in importance.

Farmers have found that they must keep their marketing associations flexible. Cooperatives that haven't changed with the times and



These are two of many products that cooperatives advertise and sell under their own brands in both domestic and overseas markets. The packages of Sun-Maid raisins and Diamond walnuts were on display at a U.S. trade fair abroad.

farmers' needs have passed out of existence. Those that provide up-to-date services have maintained a place in the distribution of farm products.

Figures Tell Story

DATA compiled from available records show 1,167 active marketing associations in 1900. This

number increased year by year until 1923, when there were approximately 12,500.

Early Development

SOME of the earliest cooperatives were formed to manufacture

cheese and butter. In the mid-1800's, grain and livestock farm-

ers organized cooperatives. A fruit marketing cooperative was begun in New Jersey in 1867.

The period from 1867 into the 20th century saw extensive development of cooperative marketing, stimulated by the Grange and others such as Farmers Alliance, American Society of Equity, Farmers Union, and American Farm Bureau Federation.

Toward the end of the 19th century and into the 20th, local associations began to federate and undertake terminal marketing to provide more services to farmers, although cooperative marketing was still essentially a local processing, assembling, or selling operation.

The early 1920's marked a period of accelerated development of marketing cooperatives. Of the more

Cooperatives have progressed considerably since this typical early market for dairy products.



Table 1.—Number and estimated memberships ¹ of farmer marketing cooperatives, by geographic divisions, 1961-62

Geographic division	Cooperatives listed		Estimated memberships	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
West North Central.....	2, 296	40. 9	1, 314, 010	38. 3
East North Central.....	946	16. 9	773, 835	22. 6
West South Central.....	687	12. 2	312, 285	9. 1
Pacific.....	547	9. 8	140, 890	4. 1
Mountain.....	315	5. 6	138, 800	4. 0
Middle Atlantic.....	302	5. 4	123, 520	3. 6
South Atlantic.....	291	5. 2	367, 765	10. 7
East South Central.....	172	3. 1	238, 500	7. 0
New England.....	53	. 9	20, 360	. 6
Total.....	5, 609	100. 0	3, 429, 965	100. 0

¹ Data for Alaska and Hawaii not included.

than 7,000 associations organized from 1910 to 1920, almost two-fifths marketed grain; a fifth, dairy products; a sixth, livestock; and a seventh, fruits and vegetables. A number of cooperative meat slaughtering and packing plants appeared in Wisconsin in this period.

Since 1923, newly formed associations have not been numerous enough to counterbalance discontinuances. However, the active associations on the average have increased their business volume and membership.

Over 5,600 active marketing associations were operating at the close of the 1961-62 fiscal year. Of this total, almost 58 percent was in the 12 North Central States, 21 percent was in 16 Southern States, 15 percent was in the 11 Mountain and Pacific States, 5 percent in the Middle Atlantic States, and 1 percent in the New England States (table 1).

The 10 States reporting the largest number of marketing associations were: Minnesota, 787 associa-

tions; Iowa, 456; Texas, 432; Wisconsin, 388; California, 359; North Dakota, 355; Illinois, 246; Kansas, 243; Nebraska, 211; and South Dakota, 187.

Over a third of the marketing associations were primarily engaged in marketing grain, including soybeans and soybean products, for their members; and over a fourth were dairy associations. Almost 12 percent handled fruits and vegetables, and 11 percent livestock and wool. Cotton associations represented slightly more than 9 percent of the total number of marketing associations (table 2).

Almost 61 percent of the membership of the active marketing associations during the 1961-62 operating period was in the 12 North Central States (table 1). About 27 percent was in the 16 Southern States, and 8 percent was in the Pacific and Mountain States. The New England and Middle Atlantic States combined had slightly over 4 percent of total membership.

The 10 States leading in memberships for marketing associations

were: Minnesota, 364,975; Iowa, 255,810; Ohio, 193,115; Illinois, 176,575; Kansas, 173,295; Indiana, 170,500; Nebraska, 167,510; Wisconsin, 151,490; Texas, 147,210; and North Dakota, 144,340.

Grain and livestock associations had the largest membership. Grain associations accounted for 30 percent, and livestock associations for 23 percent (table 2). Dairy associations had 18 percent and cotton associations 10 percent of the total.

The gross value of farm products marketed by cooperatives in 1961-62 amounted to \$13 billion (table 3). This is the largest volume so far in the history of farmer cooperatives.

Not including Alaska and Hawaii, the net value of this marketing business after eliminating duplication arising from business done between cooperatives amounted to \$10.2 billion. This net value represents the value at the first level at which cooperatives trans-

act business for farmers. It does not include terminal market sales for local cooperatives made by regional associations (fig. 4).

The 12 North Central States had a combined marketing volume amounting to almost 47 percent of the total net value (table 1). The Pacific States accounted for over 16 percent of the net volume. The remaining six divisions accounted for only 37 percent.

The first 10 States and the net value of the farm products marketed cooperatively in them in 1961-62 were: California, \$1.2 billion; Minnesota, \$743 million; Wisconsin, \$552 million; Illinois, \$550 million; Texas, \$535 million; Iowa, \$518 million; Ohio, \$478 million; New York, \$476 million; Kansas, \$341 million; and Indiana, \$331 million.

Three commodity groups represented a little more than 70 percent of the total net value of farm products marketed by an es-

Table 2.—Number and estimated memberships of farmer marketing cooperatives, by specified commodity groups, 1961-62

Commodity group (classified according to major product handled)	Cooperatives listed		Estimated memberships	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Beans and peas (dry edible).....	15	0.3	10,025	0.3
Cotton and cotton products.....	527	9.4	327,415	9.5
Dairy products.....	1,461	26.0	607,275	17.7
Fruits and vegetables.....	654	11.6	108,510	3.2
Grain, soybeans, soybean meal and oil.....	1,970	35.0	1,046,580	30.5
Livestock and livestock products.....	453	8.1	785,080	22.9
Nuts.....	29	.5	55,760	1.6
Poultry products.....	113	2.0	83,195	2.4
Rice.....	61	1.1	13,775	.4
Sugar products.....	68	1.2	30,250	.9
Tobacco.....	30	.5	245,655	7.2
Wool and mohair.....	182	3.2	104,720	3.0
Other ¹	63	1.1	13,120	.4
Total marketing.....	5,626	100.0	3,431,360	100.0

¹ Includes forest products, fur pelts, hay, hops, nursery stock, tung oil, coffee, and other farm products not separately classified.

Table 3.—Estimated value ¹ of farm products marketed for patrons, by geographic divisions, 1961–62

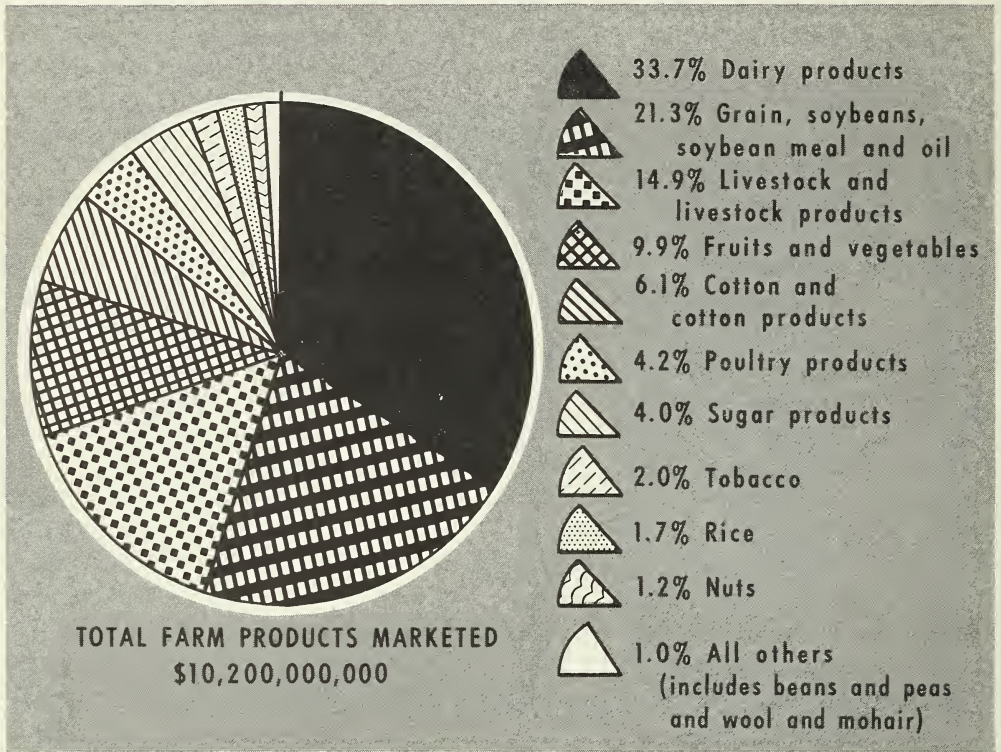
Geographic division	Estimated value of farm products marketed for patrons			
	Gross (includes inter-cooperative business)	Percent	Net (excludes inter-cooperative business)	Percent
	<i>1,000 dollars</i>		<i>1,000 dollars</i>	
West North Central.....	3, 391, 888	26. 1	2, 517, 019	24. 8
East North Central.....	2, 969, 417	22. 9	2, 239, 963	22. 1
Pacific.....	2, 168, 773	16. 7	1, 652, 240	16. 3
West South Central.....	1, 238, 728	9. 6	943, 514	9. 3
Middle Atlantic.....	965, 415	7. 4	793, 699	7. 8
South Atlantic.....	894, 440	6. 9	797, 775	7. 9
Mountain.....	711, 124	5. 5	588, 718	5. 8
East South Central.....	429, 266	3. 3	405, 424	4. 0
New England.....	210, 469	1. 6	209, 170	2. 0
Total.....	12, 979, 520	100. 0	10, 147, 522	100. 0

¹ Data for Alaska and Hawaii not included.

This is one of the 1,970 grain cooperatives that provides efficient storage, marketing, and merchandising service for farmer members.



Figure 4.—Relative importance of major farm products marketed by cooperatives, 1961–62.



estimated 6,422 associations in 1961–62. These groups were: Dairy products, \$3,425 million; grain, soybeans, soybean meal, and soybean oil, \$2,162 million; and livestock and livestock products, \$1,513 million.

Commodities marketed during 1961–62 were: Beans and peas (dry edible), cotton and cotton products, fruits and vegetables, nuts,

poultry products, rice, sugar products, tobacco, wool and mohair, and other products, including forest products, fur pelts, hay, hops, nursery stock, and tung oil.

Each of the major commodity groups marketed by farmer cooperatives is discussed separately in the following pages to show the variations in organization setup, methods of operation, and status.

Cotton and Oilseed Cooperatives

by Henry W. Bradford
Chief, Cotton and Oilseed Branch

PRODUCERS of cotton and cottonseed own and operate some 530 cooperatives to process and market

their crops. These associations reported a volume of business of \$625 million in 1961–62 from a

combined membership of more than 327,000 (table 4).

Cotton cooperatives remained

fairly constant in number the preceding decade, but their total business increased about 65 percent.

Organized First in 1870's

THE first serious efforts by producers to develop cooperative marketing of cotton developed soon after the Civil War. Numerous organizations were started during the half century from 1870 to 1920. Several of these attempted to cover most of the Cotton Belt. Some organized on a State basis; others were local organizations.

The Grange, or Patrons of Husbandry, sponsored a cotton marketing program in the early 1870's. Plans for collective selling of cotton were put into effect by State Granges of Alabama, Georgia, Mississippi, Louisiana, and Texas. Established cotton firms were appointed as bonded sales agents to handle cotton on a commission basis. The period of actual marketing under this plan was brief.

Following 1875, the agency system was discontinued.

The Farmers Alliance was active in promoting cotton marketing by farmers during the period, 1875-90. Its principal cotton marketing activities were started in Texas but later spread to other States including Alabama, Georgia, Mississippi, and Oklahoma. Growers were organized in local alliances, and these locals grouped in county alliances.

The Farmers Alliance Exchange, located in Dallas, Tex., was organized in 1887 to market cotton and other crops and purchase farm supplies. Cotton samples were assembled in 25-bale lots of like quality by the business agents of county alliances and sent to the State Exchange for display and sale. The

Table 4.—Cotton and cottonseed products cooperatives: Estimated number of associations, memberships, and value of business, by specified periods and years, 1931-62

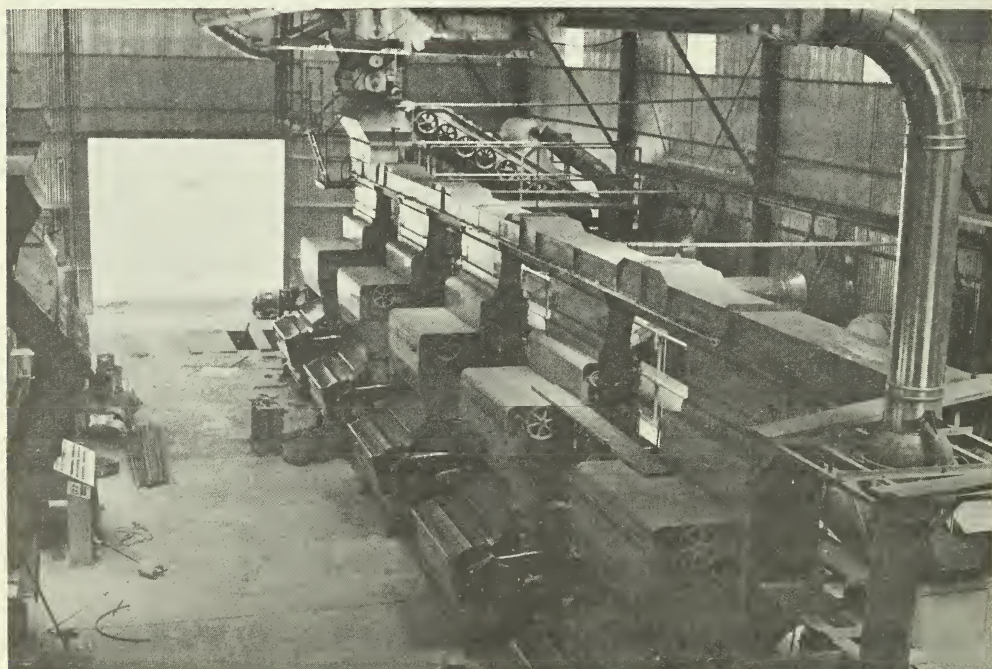
Period or year	Associations	Memberships	Value of business ¹
	<i>Number</i>	<i>Number</i>	<i>1,000 dollars</i>
1931-35 average.....	271	217, 000	88, 200
1936-40 average.....	422	307, 000	102, 760
1941-45 average.....	539	239, 800	151, 000
1946-50 average.....	524	308, 000	310, 240
1951-55 average.....	539	434, 186	398, 665
1955-56.....	558	510, 780	478, 944
1956-57.....	566	433, 415	487, 397
1957-58.....	563	438, 375	412, 501
1958-59.....	529	410, 820	574, 438
1959-60.....	527	414, 325	607, 390
1960-61.....	531	375, 575	591, 404
1961-62.....	527	327, 415	624, 607

¹ Value of net business done between cooperatives is not included from 1951-55 average to 1961-62.



In the "good old days," this is the way cotton went to the gin (above).

Today as a result of improved technology, efficient management, and improved financing, inside of a modern gin as shown below looks like this.



Exchange claimed to have handled more than a million bales of cotton during its first year with benefits to growers of more than \$3 million.

A major problem of the Alliance was that growers were financed by credit merchants who required that this cotton be sold to them. The Exchange attempted to finance growers but was not successful because of limited capital.

In 1887, the Farmers Alliance united with a number of contemporary farm organizations and formed the National Farmer Alliance and Industrial Union. As the Alliance became larger and more widespread, its energies shifted from marketing toward political activities. Political reverses in 1894 destroyed much of its influence.

Between 1885 and 1905, a number of organizations were formed to bring about improved conditions for cotton growers. The Southern Cotton Association was typical of several such organizations. Their efforts were directed primarily toward increasing cotton prices by campaigns for acreage reduction and by holding cotton off the market.

The Farmer's Educational and Cooperative Union became interested in cotton marketing problems shortly after its organization in 1902. Initial efforts were in conducting campaigns for limiting the acreage of cotton as a means of influencing price. The Union advocated holding and storing cotton to reduce the amount marketed in any given harvesting season.

This program for storing led into warehousing, and many cotton warehouses owned by local groups of farmers were organized. Since there were no cooperative statutes

at that time, these warehouse companies were chartered under general corporation laws of the several States.

Voting control and dividends were on the basis of shares owned. Sales and transfer of stock were not restricted. As a result, many successful associations slipped from grower control. Thus growers lost not only associations that failed but successful ones also.

Some 1,500 of these farmers' warehouses were reported to have been in operation in 1909, principally in Texas, Mississippi, and Georgia. In addition to the warehouse companies, hundreds of farmer-owned stock company gins were organized between 1905 and 1919, mostly in Texas and Oklahoma.

The Farmers Union sponsored many of these but others were started by independent local groups of farmers. Despite organizational weaknesses, several of these associations survived and were later reorganized under cooperative statutes.

Interest of cotton growers in co-operatives was revived shortly after the First World War. The American Cotton Association, a southern association of farmers, bankers, merchants, warehousemen, and others interested in the welfare of cotton farmers held its first annual meeting at Montgomery, Ala., in April 1920.

At this meeting, a committee was appointed to work out and recommend plans for cooperative marketing among cotton producers. This interest was further stimulated by a decline in the price of cotton from above 40 cents a pound in June 1920 to about 10 cents by the following spring.

Present Patterns Began in 1920's

THE current pattern of organization of cotton processing and marketing cooperatives developed following the enactment of cooperative marketing statutes by several of the cotton producing States after World War I. A cooperative gin organized at Olustee, Okla., in 1919, was reported to be the first incorporated under a cooperative marketing statute.

The Oklahoma Cotton Growers Association, Oklahoma City, organized in 1921, was the first of some 19 State or regional cotton marketing associations organized through 1927. More than half of these, or their reorganized successors, were still in operation by the year 1963.

For several years during the middle 1920's most of these State and regional associations were federated in a national sales organization, American Cotton Cooperative Association. In 1963, four

associations were still members of this federation, with headquarters at Atlanta, Ga.

The first of the cooperative cottonseed oil mills now in operation was organized as a cooperative in 1922. However, this association at Minter City, Miss., had previously operated for 15 years with many cooperative features.

Nineteen other cooperative oil mills were organized between 1934 and 1961. All but one of these were still in operation in 1963. Cooperative cotton compresses are the youngest in the family of cotton cooperatives. Most of these have been organized and built since World War II.

Cotton cooperatives have developed around four major services. These are (1) ginning, (2) marketing, (3) processing cottonseed and marketing products, and (4) compressing and warehousing baled cotton.

The Osceola (Ark.) Products Company, a regional cottonseed cooperative oil mill, serves growers in the northern Arkansas Delta region.

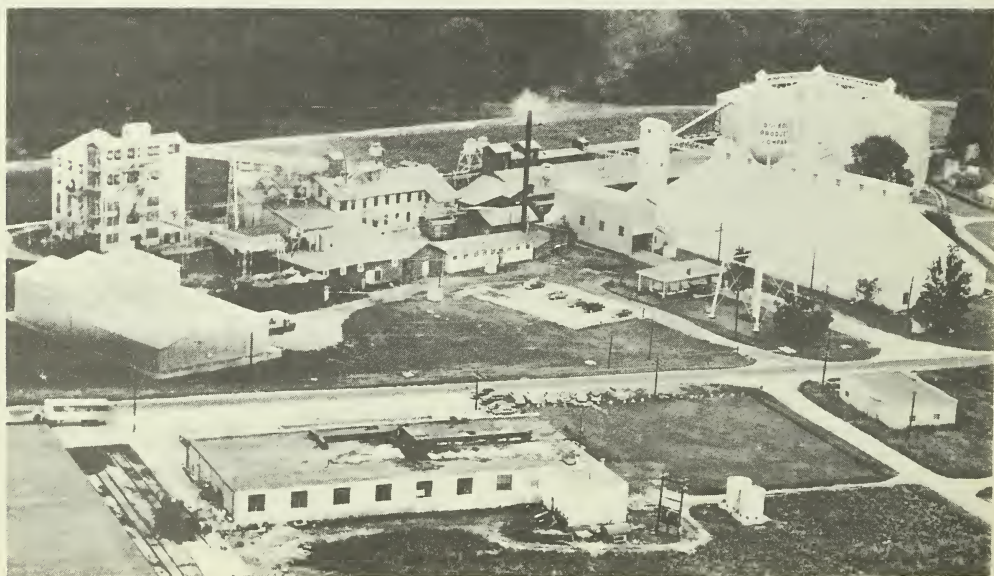
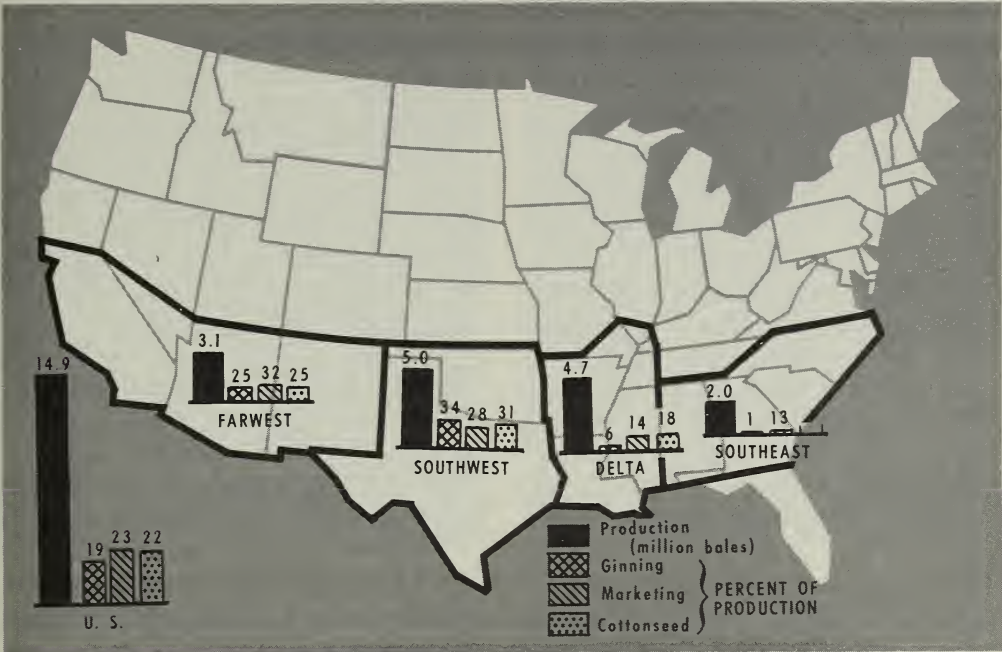


Figure 5.—Cotton production and estimated percentage of cotton marketed and ginned, and cottonseed crushed by cooperatives, by areas and the United States.



Cotton and oilseed producers also use services of such cooperatives as cotton planting seed, tung oil, soybeans, and flaxseed. Soybean cooperatives are discussed in the section on grain.

Ginning Groups Most Numerous

Cooperative gins are by far the most numerous type of cotton-grower associations. In 1964, about 500 of these associations operated some 635 gin plants in 14 cotton States, from Florida to California. Three-fifths, or 300, of these gins were in Texas. Oklahoma had 60; Mississippi, 40; California, 34; Arkansas, 30; New Mexico, 20; and Arizona and Louisiana each had 5. Four southeastern States—North Carolina, South Carolina, Georgia, and Alabama—had a total of only 10 cooperative gins.

A few associations operate as many as five plants; several have three or four plants, and quite a number have two. In practically every instance, however, the association is strictly local and serves a relatively small area. Membership varies from as few as 10 growers to as many as several hundred. However, most of these associations have between 50 and 150 members.

Cooperatives ginned about 20 percent of the Nation's cotton crop in 1963. Percentages varied considerably, however, among the four regions of the Cotton Belt. Cooperatives in the Southwest ginned an estimated 34 percent of the crop; those in the Far West, 25 percent; those in the Delta States, 6 percent; and those in the four Southeast States, only 1 percent (fig. 5).

Cooperative gins are all somewhat alike in their form of organi-

zation and method of operation. They use both stock and nonstock capital structures, though these are not as different as the terms imply. Nonstock associations use membership certificates, which carry essentially the same rights as common stock in stock associations. In both types, nonvoting capital is represented by preferred stock, various certificates, or allocated capital reserves.

In most associations membership is open to any patron. Generally, nonmembers share in patronage refunds on the same basis as members. Cooperative gins usually charge competitive rates for ginning services and pay prevailing prices for cottonseed as each bale is ginned. At the end of each fiscal year, patronage refunds are distributed to adjust initial ginning rates to unit costs and cottonseed prices to net sales returns.

The pattern usually followed by cooperative gins, when first organized, has been to borrow half or more of the capital required to pay for a plant. Additional member capital to pay off this indebtedness or to expand facilities is generally obtained by retaining operating savings. An exception to this general practice is followed by cooperative gins in California, which deduct a retain as each bale is ginned.

Many directors and key employees of cotton marketing associations, oil mills, and compresses gained much of their experience and competence by serving at the gin level. Cooperative gins serve as a point of contact between individual cotton growers and other processing and marketing associations. The local gins receive and assemble cottonseed and baled cotton for delivery to cooperative

compresses, oil mills, and marketing associations.

The extent of cooperative activity among lint marketing cooperatives, cottonseed cooperatives, and cooperative compress associations largely depends on the extent of cooperative activity among gins. That is, in States where cooperative gins are relatively important, other type cotton cooperatives are also important or have the best opportunities for growth and development.

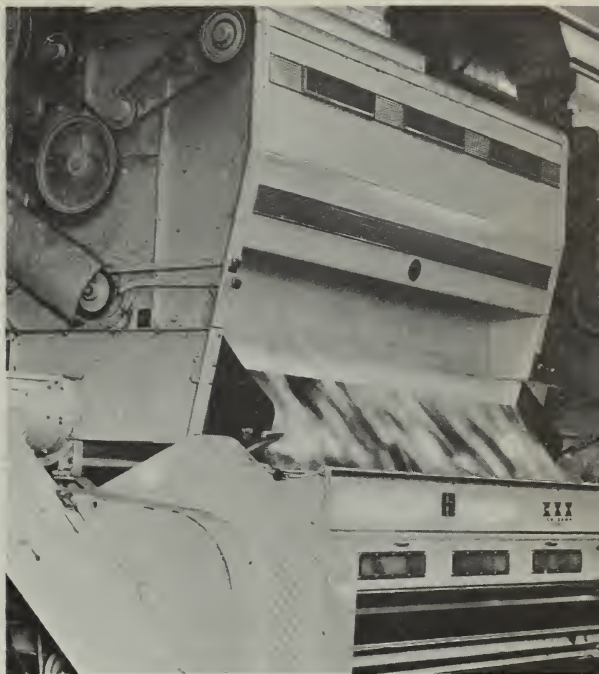
Marketing Groups Serve Widely

Cooperative cotton marketing services are available to most cotton growers in nearly all the major cotton growing areas. In 1964, about 15 area or regional associations operated from North Carolina to California.

All 15 of these regionals were similar in that they were the centralized type with growers as direct members. Marketing services offered and methods of operation varied widely.

Cotton cooperatives also help members to participate in Government loan and price support programs. They help prepare required loan documents, with the grower retaining responsibility for redemption and sale of his own cotton. And they provide a more extensive service whereby the association acts exclusively for all participating members in redeeming and selling cotton.

Some associations serve only a few counties, while others serve one or more States. The largest of these associations are: Plains Cotton Cooperative Association, Lubbock, Tex.; Calcot, Ltd., Bakersfield, Calif.; Staple Cotton Cooperative



Farmers use trailers to haul cotton to Kaweah Delta Cooperative Gin, Tulare, Calif. (left). Interior of gin at Tulare (right). This association gins about 36,000 bales annually for 330 members in its 6 plants. Lower picture shows baled cotton ginned and stored in the yard at Tulare. From here it moves to Calcot, Ltd., Bakersfield, a marketing cooperative.





New fiber testing laboratory of Plains Cotton Cooperative Association, Lubbock, Tex. Here it tests for leaf and trash content, preparation, color, and microneaire on 4 production lines at the rate of 3,000 bales (6,000 samples) per line per 8-hour shift, a potential of 36,000 bales a day. The Plains cooperative pioneered the development and use of this production line method.

Association, Greenwood, Miss.; and Cotton Producers Association, Atlanta, Ga.

Figure 5 shows that cooperatives handled an estimated 24 percent of total cotton production in the United States in 1963. Cooperatives in the Far West marketed about 32 percent of the cotton produced in that area, those in the Southwest handled 28 percent, and those in the Delta and Southeast areas marketed about 14 and 13 percent, respectively, of the production of those two areas.

Cotton marketing associations use two or more pools or sales programs to market their members' cotton. One program involves immediate sale of the members' cotton

at current market prices. Most associations have a pool program, where members give their association full authority to sell cotton in the pool. They often have a pool in which the grower retains the right to decide when his cotton will be sold. Still another program handles Government loan cotton.

Plains Cotton Cooperative Association developed an important daily competitive-bid program. It catalogued cotton from gins by qualities (grade, staple, and microneaire) and by location. It then printed this information in a sales catalogue, which also served as a bid sheet, and airmailed this to cotton merchants in major cities.

Cotton buyers made sealed bids. A computer selected the high bids. As many as 10,000 bales a day were sold by this method.

This cooperative in 1964 was selling most of its cotton direct to mills and in the export market. It leased a pier at Galveston to reduce export costs.

In 1963 it opened two branches with compresses and modern warehouses at Sweetwater, Tex., and Altus, Okla.

The cotton marketing associations distribute sales proceeds to growers after deducting costs and expenses. One association uses the capital-retain method to finance facilities and operations.

Most of the associations provide other services to members in addition to cotton marketing. They offer these services either through major departments operating under the same charter or through closely related associations, which are usually jointly managed and made up of essentially the same members.

One cotton marketing association operates a cottonseed oil mill, two others have compresses, and one has a subsidiary to provide production credit. Four provide substantial farm supply services. One of these also operates a number of cotton storage warehouses.

Cottonseed

Cooperative cottonseed oil mills were organized several years later than cotton marketing associations and cooperative gins, with the exception of one organized in 1922 and another started in Arkansas in 1964. Of the 19 associations in operation in 1964, 6 were in Texas; 4 in Arkansas; 3 in Mississippi; 2 each in Arizona and New Mexico; and 1

each in California and Oklahoma.

Together, these mills crushed an estimated 22 percent of the cottonseed produced in the United States in 1963. Cooperatives in the Far West crushed about 25 percent of the production there; those in the Southwest, 31 percent; and those in the Delta region, 18 percent. There were no cooperative oil mills in the Southeast.

Most of the cooperative mills advance the prevailing market price on receipt of cottonseed. In addition, they also distribute annual net savings earned on processing cottonseed. Other associations make an advance on delivery and then make additional payments during the processing season and final payment at the close of the season.

The price level for cottonseed has generally increased in areas with a cooperative oil mill. All cotton growers in the area benefit from this increase in price level.

Cooperative oil mills have led the cottonseed crushing industry in adopting improved processes and equipment. The first cottonseed oil mill in the United States to use the more efficient solvent process was a farmer cooperative. About 60 percent of the cottonseed processed by cooperatives in 1963 was by the solvent method, compared with about 20 percent for the remainder of the industry. Six associations use solvent extraction, and 13 use screw presses.

Four mills have oil refining facilities. At one association processing of oil begins at the miscella stage (mixture of solvent and oil) and is carried through refining, bleaching, deodorizing, and winterizing in one continuous operation. Two of the others use the miscella process to produce once-refined oil.

Two associations produce cottonseed meal that can be safely used up to 10 percent in rations for poultry.

Most cooperative oil mills further process cottonseed meal—for example, they operate pelleting machines. Some handle planting seed, insecticides, and other farm supplies for growers through member gins; and almost all handle bagging and ties for resale to member gins.

They pass on to patron gins and growers the savings on large-lot purchases of gin and farm supplies. From time to time oil mill officials assist directors and managers of member gins on management and accounting problems.

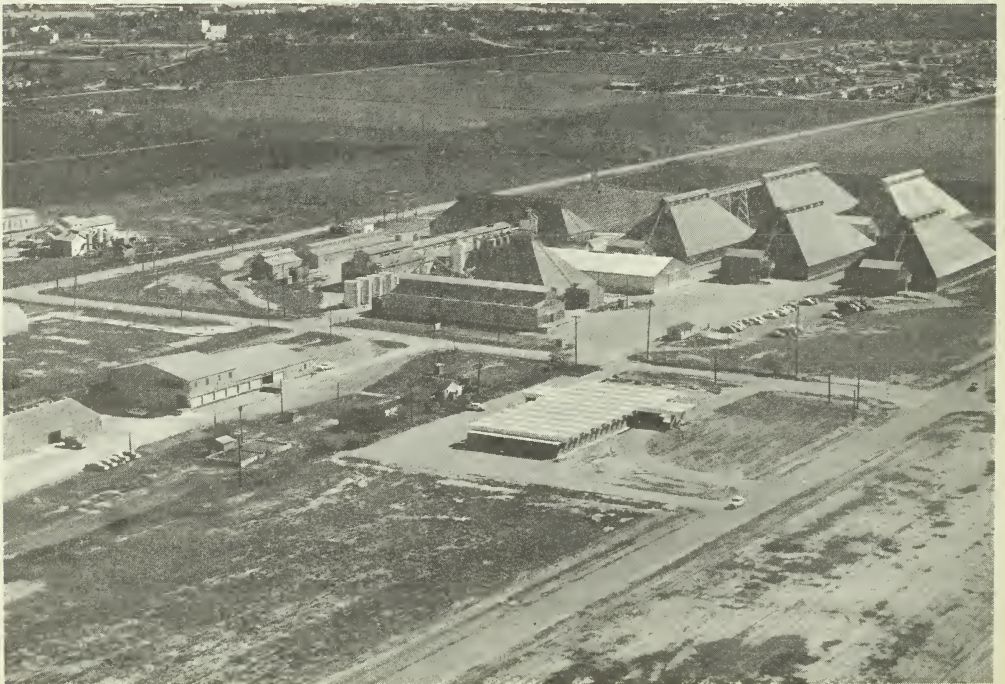
All cooperative cottonseed oil mills have the same objective—to make member returns from cotton-

seed as large as possible. Recognition of this common goal has brought most cooperative mills together to work on problems of mutual concern.

Beginning in 1949, cooperative cottonseed mills have held annual conferences. From 1955 on, the cottonseed cooperatives have met with the cooperative soybean oil mills in joint annual conferences.

Among other purposes, these meetings are held to hear and study results of current research on cottonseed and soybeans and products, to keep abreast of latest processing techniques, to compare operating results as a means of increasing efficiency, and to bring the mills closer together for group efforts in such operations as joint selling and further processing of products.

Diversified facilities of Valley Cooperative Oil Mill, Harlingen, Tex.—cottonseed oil mill, seed houses, warehouses, and agricultural chemicals plant. New office of another cooperative also appears in center foreground, that of Growers Marketing Association.





Headquarters of Calcot, Ltd., Bakersfield, Calif., a regional cotton marketing and compress cooperative serving 4,000 producers in California and Arizona. It has warehouses in Pinedale, Imperial, and Bakersfield, Calif., and Phoenix, Ariz.; sales agents in over 20 foreign countries; and branch sales offices in Atlanta, Ga., and Charlotte, N.C.

Chiefly as a result of these meetings, the two groups of cooperative oil mills organized a cooperative central sales agency—Soy-Cot Sales, Inc., with headquarters in Chicago, Ill. This association, with 11 cottonseed cooperatives and 10 soybean cooperatives as members, started operations in September 1963. Its major purposes are to sell on a joint basis soybean and cottonseed products in both domestic and foreign markets and to further expand the markets for these products.

Cottonseed and soybean oil cooperatives are also studying the possibility and advisability of processing and marketing oil on a joint basis.

Compresses

Operating cotton compresses is the latest business undertaking of

cotton growers. Eight cooperatives with 15 compresses were in operation in 1964. Three of these with growers as direct members are in the Delta area of Mississippi and Arkansas.

The cotton marketing association in California operates compresses at four locations, three in the State and another in Arizona. These four plants are an integral part of the association's marketing facilities. Three different federated groups of gins in Texas own and operate compresses. One association operates a storage warehouse at a Gulf port.

Operations of compress associations have proved satisfactory. Net savings have ranged from about \$2 to \$4 a bale, and total savings per association have been rather substantial because of large volumes handled. In addition, the

availability, service, and convenience of these compresses often have been of equal or greater value to their members than net savings realized.

Planting Seed

Members of the California Planting Cotton Seed Distributors, Bakersfield, Calif., multiply seed from the Shafter Experiment Station and produce planting seed for most of the San Joaquin Valley cotton growers. This association has been operating for over 30 years. It specializes in the Acala variety.

The Texas Planting Seed Association, with headquarters in Bryan, Tex., specializes in producing and distributing cotton planting seed, handling several varieties. Growers produce seed under contract. The association distributes cottonseed through cooperative gins.

Crop improvement associations certify cotton planting seed in most of the cotton-producing States, but they do not specialize in multiplying and distributing cottonseed as the California and Texas cotton planting-seed associations do.

Other Oilseeds

Tung-oil associations in the Southeastern States process and market a substantial portion of the tung-nut crop. Most of these associations are members of a federation that markets tung oil and also acts as a trade association for developing and promoting new uses.

Growers of castor beans, sunflower seeds, safflower seed, sesame, and other vegetable oil crops, including peanuts for oil, have not been able to organize separate cooperatives for processing oil. Relatively small acreage per farm and lack of concentrated areas of production have so far discouraged oil-processing cooperatives for these crops. However, a cooperative cottonseed oil mill in Arizona has processed safflower seed in recent years, and a large, regional farm supply and marketing association in Georgia has crushed peanuts for oil. This latter cooperative refines, packages, and sells peanut oil for the retail trade. It also processes and markets fresh peanuts and pecans for the wholesale and retail trade.

A Texas cottonseed oil mill had plans to add a castor oil bean mill in 1965.

Dairy Cooperatives

by George C. Tucker, Chief
and Donald R. Davidson
Dairy Branch

DAIRY farmers in the United States long ago learned an important way of dealing with marketing problems was through operating strong, efficient cooperatives.

Acting alone, dairymen can do

little to solve their marketing and purchasing problems. The volume of farm products marketed or supplies purchased by each farmer is relatively small. But, through cooperative effort, dairy farmers

have been able to increase their marketing strength and bring about efficiencies and improve-

ments in marketing their products and purchasing their farm supplies and services.

Cooperation—Then and Now

DAIRYMEN have made major use of cooperative marketing for several decades. In fact, dairy farmers pioneered in applying cooperative principles in marketing farm products. Farmers are said to have cooperated in making cheese as early as 1810. In the latter part of the 19th century, associations closely resembling present-day cooperatives became firmly established in the butter and

cheese industries. By the end of the century, more than 70 percent of all farmer cooperatives were dairy associations.

Membership rose sharply during the bitter depression years of the early 1930's, declined during the latter part of that decade, rose during the challenging period of World War II, and hit an alltime high of 828,000 farmers in 1952. Data in table 5 show this trend.

Table 5.—Number of dairy cooperatives, their membership and dollar volume of business, for specified 12-month periods, 1913 to 1961-62

Period	Number of dairy cooperatives ¹	Number of members	Gross business (includes inter-cooperative business) ²
		<i>1,000 members</i>	<i>\$1 million</i>
1913-----	1, 187	-----	60
1921-----	1, 579	-----	228
1925-26-----	2, 197	460	535
1930-31-----	2, 391	725	620
1935-36-----	2, 270	720	520
1940-41-----	2, 374	650	693
1945-46-----	2, 210	739	1, 428
1950-51-----	1, 928	814	2, 388
1951-52-----	1, 939	828	2, 696
1952-53-----	1, 917	812	2, 968
1953-54-----	1, 862	814	3, 018
1954-55-----	1, 824	819	3, 030
1955-56-----	1, 762	800	3, 149
1956-57-----	1, 744	777	3, 433
1957-58-----	1, 608	729	3, 627
1958-59-----	1, 594	695	3, 709
1959-60-----	1, 541	663	3, 828
1960-61-----	1, 500	630	4, 042
1961-62-----	1, 461	607	4, 561

¹ Cooperatives whose principal activity is marketing milk or its products. Not included are data for associations engaged in marketing dairy products as a sideline activity. Only those cooperatives voluntarily reporting or for which reasonable estimates could be made are included. However, it is believed that only a few small associations were not included.

² Total business, including supplies and services, with nearly all from dairy products marketed.

During the 25 years, 1937-62, the number of dairy cooperatives declined 40 percent, and membership decreased 13 percent; however, dollar volume of business jumped about 600 percent. The decline in number of associations reflects, for the most part, strengthening of existing cooperatives through mergers or consolidations, as well as the closing of some marginally successful, or unsuccessful, associations.

Likewise, the decrease in membership may be explained by improved technology in dairy farming. Out of the seeming paradox of cows declining in number and herds growing in size, this last quarter century has seen dairying increase in specialization and milk production.

Once chiefly a sideline enterprise on many farms, dairy herds are evolving into larger-scale operations on fewer farms. Even after adjusting the 600 percent increase in dollar volume of business to reflect decreased dollar purchasing power, the increase in volume of business handled by dairy cooperatives is impressive.

Statistics Tell Story

For the last decade, dairy products have accounted for one-third of the net value of all farm products marketed by farmer cooperatives.

In addition to 1,461 cooperatives that handle dairy products as their major function, 103 associations handle such products as a sideline activity. Most of the latter specialize in marketing grain or poultry or in purchasing farm supplies. They handle about one-fifth of 1 percent of the total value of dairy

products marketed by farmer cooperatives.

Ninety-six percent of the dollar volume of business of the 1,461 dairy cooperatives comes from marketing dairy products. The other 4 percent comes from marketing other farm products, purchasing farm supplies, and performing special services.

Nearly half the cooperatives handling dairy products are in Wisconsin and Minnesota. The remainder are distributed throughout the Nation.

More than 600,000 farmers are working together in cooperatives to solve their dairy marketing problems. Since slightly less than 1 million farmers sell milk in our country today, this means about two-thirds of our Nation's dairy-men belong to dairy cooperatives.

Thousands of producers who are not members of dairy cooperatives share in the benefits arising from such concerted action. Through their joint efforts, cooperative members have helped all dairy farmers obtain more stable and remunerative markets.

Dairy cooperatives provide many services to producers—such as checks on the test and weight of members' milk sold directly to dealers, technical assistance in producing high-quality milk, representation at Federal Order and State regulatory milk hearings, a legislative voice, and marketing information. Some of these services are not otherwise available or are not available to the same extent from other-than-cooperative enterprises.

Underlying all explanations for the importance of dairy cooperatives is, of course, the magnitude of the dairy industry. Ranking

among the Nation's six greatest industries, dairying claims one-fourth of the United States' approximately 3.7 million farms. These 1 million farm families derive all or part of their income from milk. In 1962, their cash receipts from marketings of dairy products were about \$4.9 billion. No other segment of agriculture is so important in every State.

About 126 billion pounds of milk was produced in this country, including Alaska and Hawaii, in 1962. Of this total about half was consumed in fluid form, a small proportion was fed to calves, and the remainder was used in manufactured dairy products.

Cooperatives play a significant part in handling nearly all principal dairy products. They manufacture almost 60 percent of the butter, about 25 percent of the cheese, and nearly 75 percent of the nonfat dry milk in this country. Thus far, cooperatives have had limited importance in milk bottling and processing of milk products such as cottage cheese and ice cream.

Current Trends

A key feature of cooperative marketing of dairy products is this: Such marketing is now concentrated near the farm level. It is chiefly on the wholesale level but to a more limited degree on the retail level. This is shown by the significance of manufacturing operations and bargaining activity and the minor importance of cooperative retail sales.

There are trends toward larger but fewer processing plants and organizations in all branches of the dairy industry. These are due in part to opportunities to reduce av-



Contrast the old and new methods in butter packaging by cooperatives. An early day print room of Land O'Lakes Creameries, Minneapolis, could turn out 35,000 pounds daily. Modern methods made it possible for this large merchandising federation to package and sell a much larger volume of butter in recent years.



erage processing costs per unit as volume increases. They are also due to the more effective sales job large organizations can perform. The U.S. Census of Manufacturers indicates there are about 6,000 fluid milk plants in the United States. Of these plants, nearly 15 percent do 70 percent of the processing and distributing of fluid milk.

The dairy farmer is no longer confined to local handlers for market outlets. Now, through his cooperative, he can and must deal with large nationwide dairy concerns with access to milk supplies from many areas. Such concerns seek to buy milk where prices are lowest and to process it in fewer, more centrally located plants for large-scale distribution.

Where economic conditions preclude efficient operation in small plants, cooperatives need to plan ways and means of increasing volume. This may involve enlarging existing facilities, constructing larger plants, purchasing other plants, or merging with other cooperatives. Further use of sales federations and federations of bar-

gaining cooperatives may be one of the best ways for cooperatives to expand.

The size of the marketing area served by individual cooperatives is widening almost unbelievably, thanks to improvements in highways, in methods of refrigerating and transporting milk, and in more uniform quality of milk.

Leading dairy cooperatives are looking for ways to expand market outlets for milk. They seek information on what products consumers want, and where and when they want them. Expressed in another way: Cooperatives are placing more effort on putting the proper quantities of high-quality products in the right places at the right time and at competitive prices.

This cannot be done by guesswork. Cooperative managements are concentrating more on proven scientific methods to enable them to market milk and milk products most effectively. They are spending more money for market research and calling on research agencies for assistance far more than in the past.

Classification of Cooperatives

DAIRY cooperatives differ widely in their marketing programs and service activities. They are commonly classified according to the functions they perform. Such classification divides them into three major groups: (1) Bargaining, (2) handling, and (3) service.

Dairy cooperatives are often further classified according to products marketed. This divides them into groups marketing unprocessed

Grade A milk, unprocessed manufacturing grade milk or cream, butter, cheese, dried milk, evaporated milk, ice cream, and fluid milk products.

During 1957, more than two-thirds of the cooperatives operating plants producing manufactured products made a single product. The trend is away from such specialization, however, as dairy cooperatives develop more diversified or flexible plants. Such

plants are able to shift production among two or more of the principal dairy products in compliance with short-term changes in price relationships. They have, therefore, several alternative outlets and cannot be classified on a single-product basis.

Dairy cooperatives may be classified as follows:

I. Bargaining cooperatives: A. Grade A milk; B. Manufacturing grade milk.

II. Handling cooperatives: A. Grade A milk—1. Packaging and distributing, 2. Manufacturing; B. Manufacturing grade milk—1. Buttermaking, 2. Cheesemaking, 3. Milk drying, 4. Diversified manufacturing, 5. Other manufacturing; C. Merchandising (finished products).

III. Service cooperatives: A. Production—1. Breeding, 2. Herd

improvement, 3. Other; B. General services.

Some dairy cooperatives do not fit exactly into this classification. Activities of many cooperatives fall within the scope of more than one class. In the great majority of cases, however, it is not difficult to determine which class best describes their activities.

In some cases, cooperatives marketing dairy products have expanded their operations to include various other activities and may be best classified according to the major service performed. For example, Matanuska Maid, Inc., Palmer, Alaska, while primarily marketing dairy products, is also the major supplier of other services such as grain drying and storage, agricultural production supplies, machinery, and equipment.

Methods of Marketing

WITH no centralized public market place for selling milk, farmers learned early that they could provide a market or improve unsatisfactory market conditions best by banding together in a co-operative effort. The method of marketing used has depended largely on what use was made of the milk. While many cooperatives have marketed manufacturing grade milk through their own plants, they have generally used the bargaining method in marketing milk for fluid consumption to the proprietary plants.

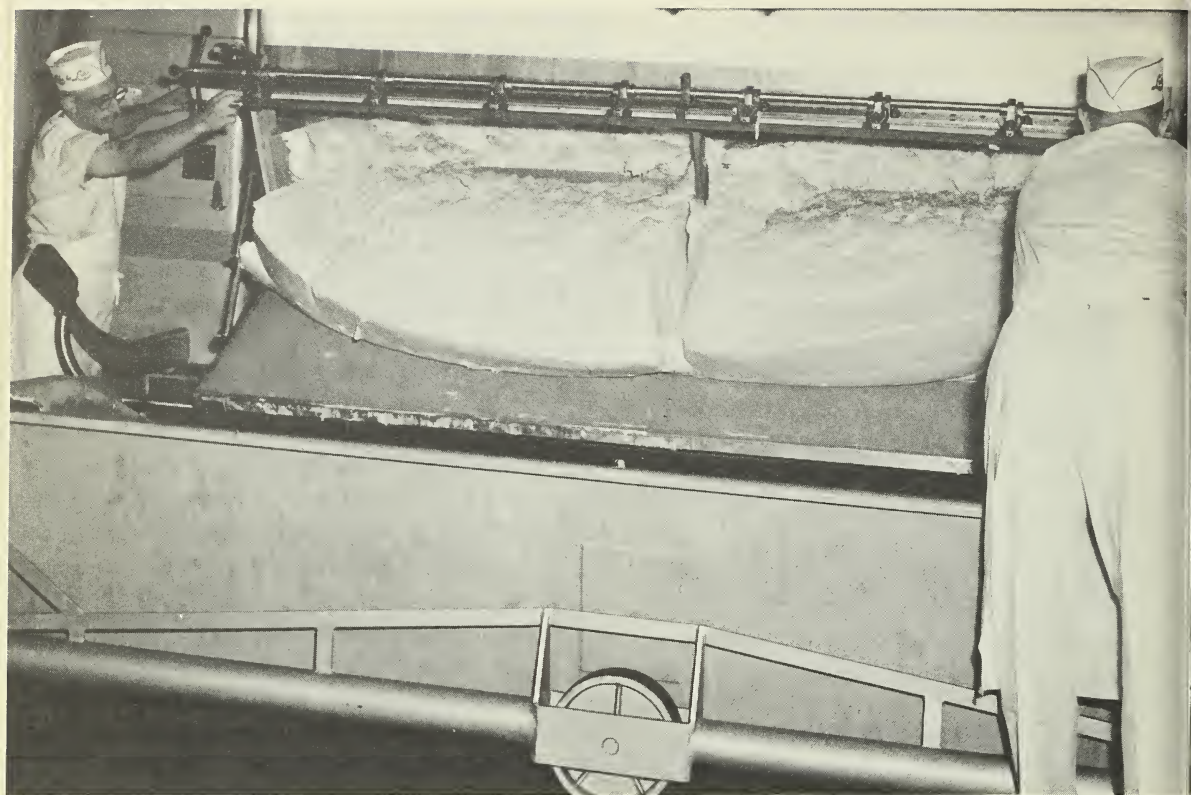
Bargaining

Several reasons have combined to cause dairy farmers to develop bargaining cooperatives.

Dairy farmers have often experienced difficulty in acquiring or building a successful milk packaging business. Acquisition of a desirable, going milk packaging business has usually required more capital than the cooperatives have had or were willing and able to obtain.

In addition, the alternative of building a packaging plant and developing distribution outlets has generally been less attractive.

A new firm entering the market faces competitive problems in getting consumers to shift to the new brand of milk. Also, management of a new firm may be handicapped in dealing with many problems because of inexperienced personnel.



Many large manufacturing cooperatives specialize in producing butter and nonfat dry milk. Here butter is removed from the churn at the Denmark, Wis., plant of Lake to Lake Dairy Cooperative, a member of Land O'Lakes Creameries.

Because of its perishability and bulk, milk produced for fluid use ordinarily is sold on the local market. Both the supply areas and the market distribution areas have expanded greatly since the end of World War II; nevertheless, the market for fluid milk is much more limited, geographically, than that for manufactured dairy products.

The development of new machines continues to favor the use of large-scale methods in both processing and distributing milk. Consequently, in many city markets, a few large distributors handle the major part of the milk supply. Independent farmers as-

sociated with such markets are frequently at a disadvantage in bargaining with them. Generally, farmers have sought to improve marketing conditions through organizing and developing strong bargaining cooperatives.

In general, bargaining cooperatives marketing large volumes have been most successful. The costs of performing many of the services provided by bargaining cooperatives are largely fixed. Hence, they need to market larger quantities if they are to keep the per hundredweight cost low. The necessary volume of sales may be available within a single large

market or in several markets within a limited territory.

Marketing Activities

The marketing activity of cooperatives that primarily use the bargaining method varies widely. Generally, such cooperatives begin as strictly bargaining cooperatives. That is, they may arrange for the sale of members' milk to processors but do not physically handle the milk. Yet many bargaining cooperatives, particularly during recent years, have found the addition of various milk handling activities useful in strengthening their bargaining position.

Thus, the concept of bargaining with reference to milk sold without physical handling has become less

meaningful. In fact, the volume of milk marketed as unprocessed whole milk may now be a more meaningful measure in determining how extensively cooperatives are using the bargaining method.

During 1957, more than 36 billion pounds, or over three-fifths of all milk marketed cooperatively, was sold as unprocessed whole milk. Of the 735 cooperatives using the bargaining method, 460 used it in marketing one-half or more of their total milk receipts. An undetermined number of these, however, were small locals affiliated with large milk manufacturing cooperatives. Also included were many large cooperatives that primarily sold milk to fluid milk processors. The overall importance of

Bargaining cooperatives such as Pure Milk Association, Chicago, Ill., are being called on to supply increasing amounts of high quality fluid milk to packaging plants. Milk is here being pumped from a farm bulk tank into a tank truck of the cooperative. By 1964, the shift from can-to-tank assembly had been almost completed in most fluid milk markets.



these 460 cooperatives is shown by the fact that they marketed almost two-thirds of all milk marketed cooperatively and more than 90 percent of the milk marketed as unprocessed whole milk.

To deal with the pricing problems in the fluid-milk industry, bargaining cooperatives pioneered classified pricing of milk according to use. They also developed systems for pooling total returns among producers on an equitable basis.

Recognizing the merits of pricing milk to processors according to use and pooling the returns among producers, Congress included such provisions in the Agricultural Marketing Agreement Act of 1937. Thus, through the use of Federal milk orders provided for in the Act, an appropriate majority of the dairy farmers in a given market are able to extend these marketing principles to all producers shipping milk to the market.

Federal orders thus provide for uniform treatment in pricing milk to all handlers in the respective markets, even though some may have wide differences in class utilization of milk received. Cooperatives can readily evaluate alternative market outlets, also, and determine the best disposition of members' milk.

Success of classified pricing and pooling system in providing stability to fluid milk markets is demonstrated by their wide use. By 1962, almost half of all milk marketed to plants and dealers was regulated by Federal milk orders. A large number of the other fluid milk markets operated under State regulations with similar classified pricing and pooling systems.

In recent years many bargaining cooperatives have assumed greater

responsibility for assembling and disposing of members' milk. The increasing specialization of many milk processors also has made the use of regular sales arrangements, including full supply contracts, more desirable. These changes have often developed in conjunction with increases in the payment of prices above the Federal order minimum.

Other Services

In addition to price negotiations with handlers and producer representation at milk hearings, milk bargaining cooperatives serve their members in many ways. They assure accurate and prompt payment for milk, provide a dependable year-round market, and keep producers informed of market conditions.

Bargaining cooperatives may also check producers' milk weights and tests, compute marketwide or association pool prices, guarantee or actually handle payments to producers, supervise or control hauling of milk from farms to plants, and participate in quality improvement programs. They often help adjust milk supplies to market needs by using pricing plans that discourage large seasonal fluctuations in production.

By 1961, two-thirds of all milk received from producers in Federal order markets came from farm bulk tanks. The shift to bulk assembly of milk was well past the halfway mark, and in several regions it was essentially completed.

Cooperatives were also gaining control over the assembly and movement of members' milk. They owned one-quarter of all tank trucks collecting milk from farm bulk tanks—more than twice the

number owned by proprietary milk companies. They had also expanded their influence over the independent haulers who owned more than half the tank trucks.

An increasing number of bargaining cooperatives physically handle part of the milk they market. One of the bargaining cooperatives' most troublesome problems is to dispose successfully of milk they cannot sell for use in fluid milk products. Special handling is required where such milk becomes a large portion of the total market.

Manufacturing usually cannot be accomplished efficiently by milk packaging and distributing plants. Expensive, specialized equipment and skilled operators are essential. Sufficient volume and continuous operations are almost imperative. Responsibility for handling reserve milk in many markets has shifted from fluid milk processors to bargaining cooperatives.

Although some cooperatives have resolved their marketing problems by sending milk to specialized manufacturing plants, an increasing number are establishing such plants themselves. Cooperatively owned manufacturing plants assure farmers producing for fluid use a market for their reserve milk. These plants also provide an outlet for additional milk when there is a price impasse in bargaining.

Handling

Not all dairymen producing milk for fluid consumption have sought improvements in marketing conditions solely through cooperative bargaining. Many have chosen the alternative of building or acquiring their own milk packaging and distributing facilities.

The number of such cooperatives has increased steadily since World War I. In 1918, 16 cooperatives were distributing milk directly to consumers; in 1929, 79; in 1940, 101; and in 1957, 197.

Fluid Packaging and Distributing

Many cooperatives organized during the late 1930's and early 1940's—particularly those in the Southeastern States—resulted from consolidations of producer-distributor businesses. By combining their marketing operations, these dairymen were able to benefit from efficiencies through increased volume.

This route salesman of the Dairymen's League Cooperative Association, Inc., New York City, illustrates efficient service for successful home delivery of fluid milk and other products—and the promotion of the cooperative's own brand on its delivery trucks.



Since World War II, adoption of a single-service milk carton and improved transportation have led to expanded distributing areas. This has resulted in increased competition and requires development of larger distributing organizations for survival.

Of the 197 cooperative distributing fluid milk during 1957, about two-thirds performed primarily bargaining or manufacturing functions. In fact, the cooperative distributing the largest volume of fluid milk products also sold the major volume of its total receipts as unprocessed whole milk. Others in the top 10 primarily manufactured dairy products.

Generally, the fluid milk packaging operations were rather small. More than two-thirds distributed less than 5,000 gallons of milk and cream daily. Only about 10 percent distributed as much as 15,000 gallons a day.

Distributing cooperatives face exacting requirements for a successful marketing program. They must distribute a product of high quality; they must also make deliveries at such times and in such manner as best satisfy the consuming public.

Many cooperatives distributing milk at retail are in relatively small markets where their association with consumers is somewhat close. Such markets have only limited outside competition. Their milksheds are rather compact, and cooperative memberships are closely knit. They generally avoid the burden of unneeded milk supplies by restricting the entry of new members unless they are needed.

In many cases, efforts of milk producers to improve their market-

ing conditions through the use of milk distributing operations have been outstandingly successful in both large cities and small towns. Yet success has by no means been universal. The necessary capital investment is high, competition for sales volume is keen, and the skilled management necessary for efficient operations is sometimes hard to find.

In recent years, some cooperatives have improved their local marketing conditions by distributing part of their milk in distant markets. However, such action may set up a chain reaction by other cooperatives that will weaken or destroy the expected benefits. This may especially be true if the effect on all farmers in the general area is considered, rather than the effect on members of the first cooperative alone.

Such chain reaction may arise in this way. Farmers originally supplying a fluid milk market entered by a distant cooperative may find some of their milk displaced, creating need for other market outlets. They, too, may seek outside fluid milk outlets. Hence, cooperatives initiating this chain reaction may soon find that all farmers are losing financially because of the increased transportation cost of marketing milk.

Manufacturing

About three in every four dairy cooperatives manufacture at least one or more dairy products. Butter, cheese, and dried milk are the major items cooperatives manufacture. In distributing these products, they operate principally at the wholesale level, with the proportion sold at retail relatively

small. Wisconsin, Minnesota, and Iowa contain most of the associations making butter or cheese, or drying milk.

Butter.—Cooperative butter-making began about the middle of the 19th century. For many years, however, specialized associations to perform this function did not become common. The period of most rapid growth of butter-making associations was from 1900 to 1910.

In 1962, the number of cooperatives making butter was estimated as between 750 and 800. The cooperative proportion of the national output of creamery butter rose slowly from 34 percent of the total production in 1926 to 58 percent of the total production of slightly more than 1.4 billion pounds in 1957.

The cost of transporting butter is low, compared with that of shipping milk or cream. As a result, cooperatives manufacturing butter are located in heavy surplus milk producing areas, and large proportions of their products are sold in distant markets.

At least 80 percent of the butter produced in this country comes from the North Central States, which appear to have a comparative advantage in milk production. Much of the butter is sold in the North Atlantic States, where concentration of population is greatest.

A large number of cooperative creameries still confine their activities to the manufacture of butter. These rely upon other marketing agencies to grade, package, and distribute it. Several manufacturing associations have joined together into federated cooperatives which perform all or part of the other marketing services required

before the butter reaches consumers.

Cheese.—The number of cooperatives making cheese of the "hard" varieties (including American Cheddar, Swiss, Blue, brick) declined from 800 in 1926 to about 300 in 1962. Some two-thirds of the cheese associations are in Wisconsin; many of the others are in adjoining States.

Cooperatives produced about one-fourth of all the Cheddar cheese manufactured in this country during 1957. Dairy cooperatives manufacture a little over 7 percent of the total United States production of cottage cheese.

In addition to American Cheddar and cottage cheese, cooperatives manufacture other types of cheese, including primarily Swiss and small amounts of brick, Munster, and Limburger. Total production of these other types of cheese represented almost 8 percent of the United States total.

As already mentioned, the first dairy cooperatives in this country manufactured cheese. Groups of neighboring farmers, who found it convenient to haul their fresh milk to a common point, set up small factories. There the combined supply could be made into cheese more easily than on individual farms. Skilled artisans were needed to convert the milk into cheese.

These cooperatives used a pooling system to distribute the net proceeds from the sale of the cheese among farmers who provided the milk, according to the quantity of milk contributed by each. The cooperative form of business was well adapted to their needs.

Milk must be delivered fresh to make good cheese. Consequently, in the horse-and-wagon days, the

area served by a cheese factory was limited. Many small, inexpensive factories sprang up at country crossroads. Since World War I, a trend toward expansion and consolidation of cheese factories has resulted in fewer but larger ones.

Most cooperative cheese factories, as is true of cooperative creameries, restrict their activities to processing. They perform only the initial step in marketing their products. Some have joined together in federations to carry out a number of marketing functions in moving the cheese from factory to consumers.

Dry Milk.—Cooperatives have assumed the major role in the manufacture of nonfat dry milk. In 1957, they manufactured over 70 percent of all nonfat dry milk. A total of 191 associations performed this feat.

Many of these individual cooperatives have attempted to increase their marketing strength through organizing sales federations. In 1957, the largest 10 cooperatives manufactured only 17 percent of all nonfat dry milk made by cooperatives, yet the 10 largest associations—some of these being sales federations—marketed nearly half of all the nonfat dry milk sold by cooperatives. Wisconsin and Minnesota are the leading States in terms of cooperative production of this product.

Before World War II, dried milk products accounted for only a small portion of the milk handled by dairy cooperatives. The war brought a tremendous demand for all milk solids. They were needed in a form that could be transported in minimum space and would retain flavor and nutritional qualities for months. The Federal Govern-

ment financed construction of 16 dehydrating plants and installation of dehydrating equipment in 9 other plants.

These plants were leased to cooperatives, who paid rent and had options either to renew the lease at the end of every 5 years or to purchase the plant. Participation in the Federal program and cooperation among local associations to supply central drying plants greatly increased the relative importance of cooperatives in producing dry milk. Subsequently, the cooperatives operating them purchased most of these "lend-lease plants."

Since World War II, the Government's Commodity Credit Corporation has been the largest buyer of nonfat dry milk because of the dairy price-support program. Like butter, cheese, and evaporated milk, nonfat dry milk is being sold in consumer-size packages. A number of dairy cooperatives have contributed to this development by preparing compact, attractive packages of high-quality products. As a result, the market for such products continues to expand.

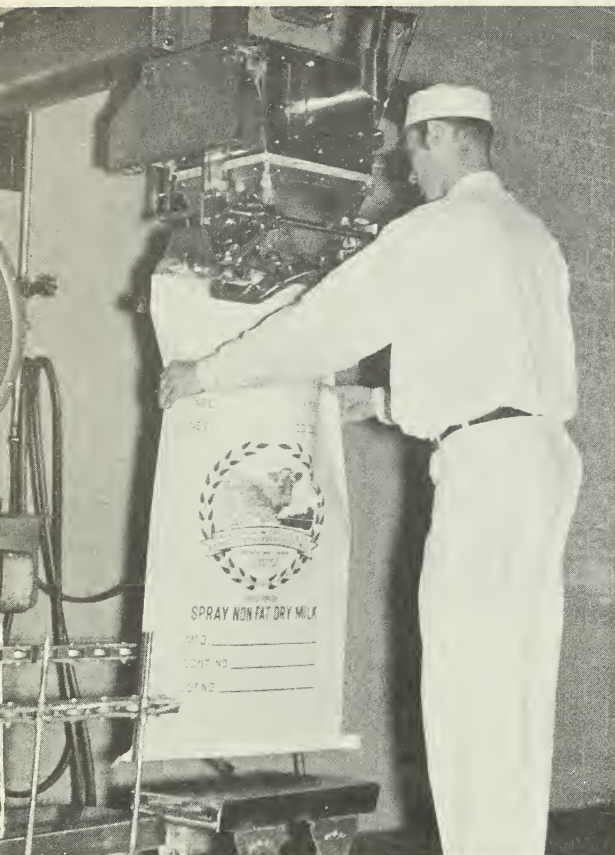
Nonfat dry milk used in food products increased 26 percent between 1950 and 1960, whereas milk production rose 5 percent during the same period. In comparison, milk fat used in foods increased less than 1 percent.

Changes in the method farmers use in selling their milk have been an important factor in the expansion of nonfat dry milk used for human food. Farmers sold about 7 percent of their milk as farm-separated cream in 1960, compared with almost 20 percent in 1950. During the 1930's, producers shipped nearly a third of their milk as farm-separated cream.



Curd is cheddared at Tillamook (Oreg.) County Creamery Association (above) one of the larger cooperative producers of cheese with 10-million pounds manufactured in 1962. American cheddar cheese in the Portland, Oreg., plant of Dairy Cooperative Association (below) is being cut and wrapped. This cooperative has made its brand, Mayflower, a well known one.





Dairy cooperatives manufacture about 75 percent of all dry milk in the United States. This new automatic bagging scale is being used in the Maryland & Virginia Milk Producers Association's plant at Laurel, Md. With this new system, "1½ men" can bag 120,000 pounds of dry milk each 20-hour day as compared to 3 men with the old system.

Dried whole milk was another dairy product for which dairy production rose sharply during the war years. By 1957, cooperatives were manufacturing about 15 million pounds of dry whole milk, according to the latest major study Farmer Cooperative Service made of integration by cooperatives. This represented nearly 14 percent of the total United States production.

Cooperatives also played an important role in producing dried buttermilk. They manufactured 49 million pounds, which accounted for nearly 70 percent of the country's total production in 1957. Most of the manufacturing cooperatives producing dry buttermilk were located in Minnesota, Wisconsin, and Iowa.

Combination of Products.—

Products manufactured in diversified or flexible plants are accounting for an increasing proportion of the total volume of items manufactured by dairy cooperatives. During the 1950's, cooperatives with diversified manufacturing operations increased in number, while specialized butter and cheese-making associations declined in number and importance.

Diversified manufacturing plants can shift from one product or group of products to another single product or group within a relatively short time. It is difficult to classify these plants accurately on a product basis because of their capacity to produce various products. On the other hand, specialized plants fit neatly into product categories.

A total of 1,180 dairy cooperatives manufactured dairy products in 1957. Nearly one-half of these associations manufactured butter only, whereas 15 percent produced Cheddar cheese only. Therefore, nearly 65 percent of the cooperatives manufacturing dairy products produced butter only or Cheddar cheese only.

Butter or cheese, or both, were included in the manufacturing operations of several other dairy cooperatives. The accompanying tabulation shows that 44 cooperatives were manufacturing butter and nonfat dry milk; 22—butter

and dry buttermilk; 22—butter, dry buttermilk, and nonfat dry milk; 26—Cheddar cheese and butter; and 35—butter and ice cream.

Dairy products manufactured	Cooperatives manufacturing dairy products in 1957
	<i>Number</i>
Butter only.....	589
Cheddar cheese only.....	174
Nonfat dry milk only.....	8
Other cheese ¹ only.....	50
Butter and nonfat dry milk.....	44
Butter and dry buttermilk.....	22
Butter, dry buttermilk, and nonfat dry milk.....	22
Cheddar cheese and butter.....	26
Butter and ice cream.....	35
Other combinations of 3 or less products.....	116
Of 4 products.....	47
Of 5 products.....	26
Of 6 products.....	12
Of 7 products.....	5
Of 8 products.....	4
Total.....	1, 180

¹ Not including Cheddar and cottage cheese.

Many dairy manufacturing cooperatives in the Midwest, originally set up to manufacture ungraded milk, have diversified their operations to include marketing Grade A fluid milk.

By diversifying to include Grade A handling, a number of these cooperatives were able to (1) qualify as pool plants and supply raw whole milk to fluid milk distributors in Federal Order markets, (2) supply bulk cream to distant markets, (3) bottle milk, chiefly for local consumption, and (4) produce higher quality manufactured products from reserve Grade A milk.

Local market demand and competition from other firms are principal reasons for many manufacturing cooperatives expanding their operations to include handling Grade A milk.

Adoption of bulk handling methods by more and more dairy farmers, which makes it easier for them to meet Grade A standards, is an important reason why many manufacturing grade producers have made the shift to Grade A milk production.

Other Products.—Cooperatives produce several dairy products—not discussed in the preceding paragraphs—in large quantities. In 1957, they manufactured over 102 million pounds of condensed skim milk, accounting for nearly 14 percent of the total United States production.

Cooperatives produced 26 million gallons of ice cream in 1957, which represented 4 percent of our total production for that year. Ice

Miscellaneous products manufactured by cooperatives in 1957	Quantity manufactured
	<i>1,000 pounds</i>
Ice cream mix.....	257, 470
Whey, whey powder, and whey solids.....	50, 657
Condensed whole milk.....	40, 042
Pharmaceutical feeding products.....	29, 220
Evaporated milk.....	12, 019
Condensed buttermilk.....	10, 292
Anhydrous milk fat.....	2, 264
Sherbet mix.....	702
Ice cream mix powder.....	328
Ice cream.....	294
Yogurt.....	247
Milk concentrate.....	149
Ice milk mix.....	142
Sherbet.....	46
Unspecified.....	5
Total.....	403, 877

cream is similar to cottage cheese in that the production of these two products is often combined with fluid milk operations.

Cooperatives also manufactured more than 400 million pounds of miscellaneous products, as shown in the previous tabulation. Most important of the items was ice cream mix, which accounted for over 60 percent of the total volume of these products made by cooperatives.

Merchandising

Many local manufacturing cooperatives in the North Central and Western regions of the United States are members of merchandising or sales federations. As the marketing problems of these local associations became more complex, they realized the necessity for pooling their individual efforts to meet the competition of large dairy merchandising concerns.

By 1961-62, there were 12 cooperative merchandising federations, with a combined total volume of business of nearly \$605 million.

Although there are relatively few of these specialized types of organizations formed primarily for selling finished dairy products to regular commercial outlets, 4 of them were rated among the country's 12 largest dairy cooperatives in 1961-62.

The largest merchandising federation—one that started by marketing only butter, but now has diversified into fluid milk, ice cream, poultry products, and farm production supplies—had a volume of business totaling nearly \$215 million in 1962. Marketing of dairy and poultry products represented 85 percent of their total

business, and members' and patrons' purchases of supplies and services accounted for the remaining 15 percent.

Two other large federations of the type located on the West Coast had a combined volume of business of about \$155 million for the same period. The brand names²⁵ of Challenge and Darigold, which appear on their milk and dairy products are among the best-known food names in the West—comparable to the widely known Land O'Lakes trade name found in Central and Eastern marketing areas.

Another brand name that has grown in popularity and is sponsored by the National Milk Producers Federation is called "Dairy Charm." Cooperatives in different parts of the country have used this brand on both manufactured dairy products and fluid milk. The Dairy Charm program has been found most attractive to medium-size dairy cooperatives that want to continue to market their own products but that also want to build for future markets and for the broader prestige which can be built under a widely and favorably known brand.

The trend toward larger dairy plants and the development of more diversified operations have helped to bring about closer coordination in the marketing activities of several sales federations.

²⁵ Challenge is the brand name of Challenge Cream and Butter Association, Los Angeles, Calif. Consolidated Dairy Products Company, owned by United Dairymen's Association, Seattle, Wash., uses the brand name Darigold; and Land O'Lakes is the brand name of Land O'Lakes Creameries, Minneapolis, Minn.

In 1961, four such federations and a bargaining association formed American Dairy Foods, Inc. (ADF). These were: Land O'Lakes Creameries, Minneapolis, Minn.; Dairy Maid Products Cooperative, Eau Claire, Dis.; State Brand Creameries, Mason City, Iowa; North Star Dairies, St. Paul, Minn.; and Twin City Milk Producers Association, St. Paul.

These five cooperatives, which own the stock of ADF, had a business volume in 1962 of about \$500 million and represented 125,000 dairy farmers. This merchandising federation will attempt to eliminate duplication of marketing and servicing functions and be in a position to move rapidly as future marketing opportunities arise.

Butter is one of the principal products handled by merchandis-

ing federations. Of the total butter manufactured by cooperatives in 1957—825 million pounds—nearly 30 percent was marketed by eight sales federations. An increasing proportion of the butter produced by cooperatives will probably be marketed by this type of federation as manufacturing facilities become more diversified and centralized in big plants.

Cooperatives manufactured 215 million pounds of American Cheddar cheese in 1957, and six sales federations marketed a little over one-fourth of this total.

Lake to Lake Dairy Cooperative, Manitowoc, Wis., made a major advancement in the merchandising of Cheddar cheese in 1961. This association was the first to be authorized by USDA to label consumer packages of cheese with the U.S. Grade AA shield.

Darigold is the trademark owned by members of United Dairymen's Association, Seattle, Wash. This name appears on dairy products used in homes throughout the four Northwest States.



Another association that has focused its operations on producing and marketing high-quality natural cheese is the Tillamook County Creamery Association, Tillamook, Oreg. Through its well-planned merchandising program, "Tillamook Cheddar" has become a widely known brand of cheese.

Since production of nonfat dry milk has increased greatly within the last two decades and this product has gained recognition as an important human food, it has become one of the major products merchandised by several marketing federations. In 1960, Turtle Lake (Wis.) Cooperative Creamery Association became the first dairy manufacturing concern in the United States to receive a permit to label its dried skim milk products as strictly Grade A quality.

Since many of the larger markets are now specifying that cottage cheese be produced only from Grade A milk, the Turtle Lake group and several other associations have specialized in making a powder that meets the stringent requirements of these markets.

Altogether, cooperatives manufactured 1.2 billion pounds of skim milk powder in 1957, and 43 per-

cent of this production was marketed by nine sales federations.

Service

Dairymen use various types of specialized cooperatives to provide a wide variety of services needed in producing and marketing milk. Two types of cooperatives have helped farmers improve their dairy production. These are the dairy herd improvement associations and the artificial breeding cooperatives.

The dairy herd improvement associations assist farmers in evaluating the productivity of each cow in members' herds by weighing and testing the milk and keeping various production records. Artificial breeding cooperatives permit efficient, widespread use of outstanding dairy bulls. Both the dairy breeding and the herd improvement cooperatives are discussed elsewhere (page 328).

Dairy farmers are looking more and more to their marketing cooperatives to provide them with needed services. As a result, these cooperatives are employing well-trained fieldmen who can deal with all kinds of technical problems that face the milk producer in his daily operations.

National Organizations

DAIRY cooperatives belong to several specialized organizations operating at the national level. These organizations assist cooperatives in the areas of legislative matters, advertising, sales promotion, merchandising, marketing, public relations, product research, and obtaining dairy supplies.

National Milk Producers' Federation (NMPF)

This farm commodity organization was formed and incorporated at Chicago in December 1916. It was one of the first national organizations whose objectives were to provide assistance and encouragement to cooperatives.

About 125 cooperatives, including 10 federations of cooperatives, marketing milk in 50 States were members of the Federation in 1962.

NMPF provides dairy farmers and their cooperatives with representation at the national level. It operates mainly as a contact agency with the executive and legislative branches of the Federal Government and as an educational institution. It analyzes legislation affecting cooperatives, farmers, and the dairy industry, and makes appraisals and advises member cooperatives on marketing, pricing, and pooling methods and other economic conditions influencing the structure and operation of dairy cooperatives.

American Dairy Association (ADA)

A group of dairymen and proprietary handlers organized this association in 1940. Unlike many dairy organizations, its contributors are not milk processors and distributors; they are dairy farmers. Objectives of this association are to promote dairy sales on a nonbrand basis and to maintain and expand markets for all milk products.

ADA's national budget has grown substantially over the last two decades. In 1940, dairy farmers contributed \$250,000, compared to about \$7 million in 1960. Part of this money is retained in each State for carrying on local activities.

Association funds are used for advertising, merchandising, research, and public relations. In recent years, ADA has put more emphasis on market research in promotion planning and in deter-

mining the public's attitude toward milk and dairy products. About three-fourths of the association's budget goes for consumer advertising.

National Dairy Council (NDC)

Nearly 50 years ago, a group of leading milk producers organized the Council to combat a serious spread of hoof and mouth disease among cattle in several States. Although NDC was formed to meet a specific problem, it has adopted this major objective: "To promote optimum health and human welfare through adequate use of milk and its products in accord with specific recommendations, and thus contribute to a more secure American agriculture and national well-being."

Dairy cooperatives have joined fluid milk handlers in supporting the Dairy Council. NDC has a 50-member board of directors composed of 20 dairy farmers, 20 milk handler representatives, and 10 equipment and supply people.

The Dairy Council sponsors programs in health education and basic research in the field of nutrition. Part of the Council's funds used to carry out these activities are provided by ADA.

Funds for local dairy councils (numbering over 70) are provided by dairy farmers and handlers serving these areas and are used to promote consumption of dairy products. These 70 affiliated units purchase educational and promotional material from the National Dairy Council.

Other Trade Associations

Dairy cooperatives, especially those operating processing or man-

ufacturing plants, may belong to several national associations, in addition to the three discussed in the preceding paragraphs.

Some of these are the Evaporated Milk Association, Chicago, Ill.; Dairy Industries' Supply Association, Washington, D.C.; Milk Industry Foundation, Washington,

D.C.; National Cheese Institute, Chicago, Ill.; National Creameries Association, Washington, D.C.; International Association of Ice Cream Manufacturers, Washington, D.C.; American Dry Milk Institute, Chicago, Ill.; and the American Butter Institute, Chicago, Ill.

Fruit, Vegetable, and Nut Cooperatives

by Martin A. Blum, Chief
and Fred E. Hulse
Fruit and Vegetable Branch

FRUIT, vegetable, and nut growers owned and operated more than 770 cooperatives that marketed more than \$1 billion worth of products in 1962. A total of 683 associations—whose business was primarily the marketing of fruits, vegeta-

bles, or nuts—accounted for less than 5 percent of all marketing cooperative memberships in 1962; yet at the same time they were responsible for more than 10 percent of the value of all farm products marketed cooperatively.

Important in Many Areas

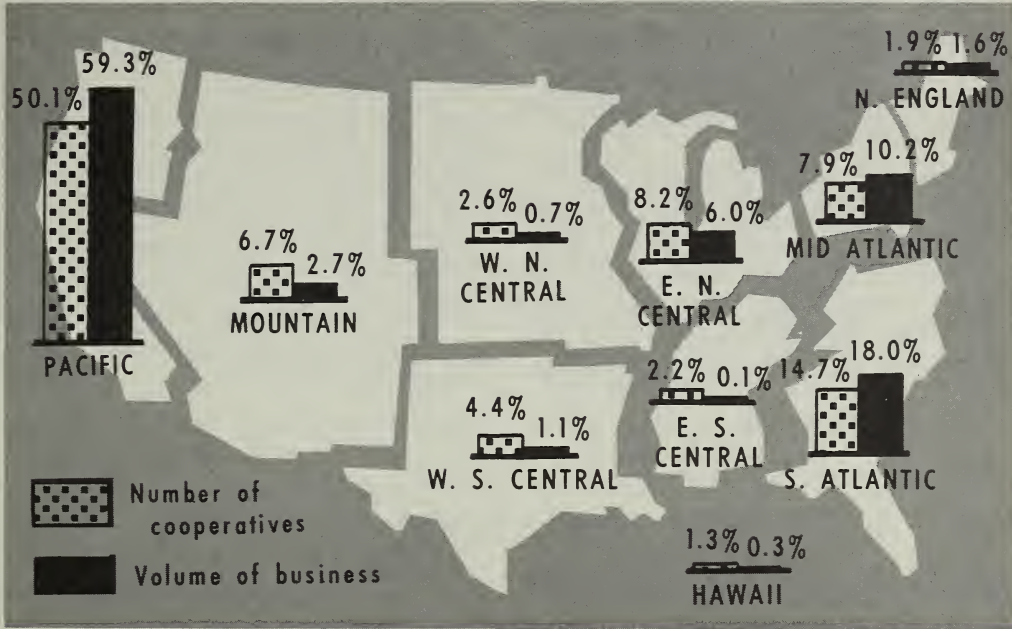
ASSOCIATIONS serving fruit, vegetable, and nut growers are located in 44 of the 50 States (fig. 6). Closely following geographic production patterns, 50 percent of the cooperatives serving fruit, vegetable, and nut growers during 1962 were located in Pacific Coast States, with California the leader. These States accounted for 59 percent of the dollar volume of all these commodities marketed cooperatively.

The South Atlantic States, with Florida the leader, ranked next with nearly 15 percent of the asso-

ciations and 18 percent of the dollar value of fruits, vegetables, and nuts marketed cooperatively in 1962. The three Middle Atlantic States, although not next in number of associations, ranked third in dollar volume of these commodities handled by cooperatives.

States most important for dollar volume of cooperative fruit and vegetable business, in addition to California and Florida, include Oregon, Washington, New York, Pennsylvania, Michigan, and New Jersey. Associations serving nut growers are most important in Cal-

Figure 6.—Distribution of total business volume and number of cooperatives specializing primarily in fruits, vegetables, or nuts by geographic area, 1962.¹



¹ Based on net business of \$1.1 billion and 683 cooperatives.

ifornia, Georgia, Oklahoma, Florida, and Texas.

Several varieties of fresh fruits, vegetables, and nuts can be found in U.S. markets at some time during the year. Most of these commodities are produced domestically and handled by marketing cooperatives.

Classification by major products handled shows 431 fruit associations, 162 vegetable associations, 61 fruit and vegetable associations, and 29 nut associations (table 6). More cooperatives serve citrus growers than producers of any other commodity. These are followed closely by cooperatives handling deciduous fruits.

Intensive and costly cultural practices, distance from market, and other related problems have been important influences in forming fruit cooperatives. For in-

Table 6.—Estimated number of fruit, vegetable, and nut cooperatives classified by commodities handled, 1961–62

Commodity	Number of cooperatives
Fruit:	
Citrus.....	147
Deciduous:	
Apples.....	59
Berries.....	49
Grapes.....	41
Olives.....	4
Mixed deciduous ¹	131
Total deciduous.....	284
Total fruit.....	431
Vegetables:	
Potatoes.....	42
Mixed vegetables.....	120
Total vegetables.....	162
Fruits and vegetables.....	61
Nuts.....	29
Total fruits, vegetables, and nuts.....	683

¹ Includes apricots, cherries, peaches, pears, plums, and other deciduous fruits in various combinations.

stance, it takes 3 to 5 years to bring most fruit trees into production, and many orchards and groves do not reach full maturity for much longer periods. Fruit growers under these conditions have frequently found cooperatives their best method of assuring adequate marketing services.

Although vegetable growers use many intensive and costly cultural practices and share with fruit growers the same needs for adequate marketing services, they have not used cooperatives to the same extent. Vegetable produc-

tion has generally been considered more hazardous, and prices have fluctuated more widely. Unlike fruit, most vegetables are an annual crop and thus allow growers greater flexibility in shifting from one crop to another.

Relatively few nut cooperatives serve a large number of growers who market from small acreages. With tree nuts—including almonds, filberts, pecans, and walnuts—many of the same production and marketing problems faced by fruit growers have stimulated cooperative activity.

Early History

FRUIT and vegetable marketing cooperatives followed dairy, grain, and livestock associations in their order of formation in the United States. Early grower efforts to market fruit cooperatively were recorded in the late 1860's, and nut growers took similar steps about 20 years later.

Fruits on East Coast

The first fruit marketing cooperative on record was the Fruit Growers' Union and Cooperative Society of Hammonton, N.J. Formed in 1867, this organization continued to operate for 30 years, marketing substantial quantities of berries, apples, pears, cranberries, and sweetpotatoes.

As early as 1872, the New Jersey Cranberry Growers' Association organized. In addition to marketing growers' crops, this association is credited with providing market news, adopting standard packages, and shipping cranberries to Eng-

land accompanied by directions for cooking.

Peach growers in three States—Delaware, New York, and Ohio—organized marketing cooperatives between 1878 and 1888. One of these associations, the Delaware Fruit Exchange, Wilmington, established grades, made inspections, and sold peaches by auction for its members.

A grape marketing cooperative operated in western New York as early as 1885. Soon other local organizations were formed, some covering the entire grape belt.

Citrus and Deciduous Fruit in California

A forerunner of a large number of deciduous fruit and citrus cooperatives, California Fruit Growers, was formed in San Francisco in 1881. Numerous California associations were organized in the early 1880's to market growers' fruit. One of these, The Orange

Growers Protective Union, formed in southern California in 1885 to route fruit to market and supply current market news to its members.

The formation of local grower-owned citrus associations in California got underway in the early 1890's. These were soon followed by the formation of the Southern California Fruit Exchanges to service local packing associations. In the early stages, each District Exchange made its own sales.

Improvements were proposed for this early system of exchanges in 1895. Along with the establishment of branch offices in important markets, the plan for strengthening the organization included incorporation as the Southern California Fruit Exchange.

Individually wrapped fruit and hand-nailed boxes, like those in this small packinghouse in 1898 in Covina, Calif., have given way to automated packing and large-scale sales organizations.

Despite problems arising over the last 70 years, this organization has continued to grow and prosper. In 1905, its name was changed to the California Fruit Growers Exchange and in 1952 it took the name of Sunkist Growers, Inc. Its headquarters are in Los Angeles, Calif.

Early California deciduous fruit growers had many marketing problems including transportation, quality, and condition of packs. Despite its efforts to meet these problems, the California Fruit Union, Sacramento, organized in 1885, had rough going, and in 1894 went out of business.

But marketing problems for California deciduous fruit growers continued and the local groups that marketed their products through



the Fruit Union were the forerunners of the locals making up the membership of a new organization—the California Fruit Exchange, Sacramento. The Exchange—with its highly developed system of grading, packing, handling, and distributing deciduous fruits—has operated continuously for more than 60 years.

At least one of the early locals of the Exchange, the Florin Fruit Growers Association, Florin, Calif., was organized under the sponsorship of the local Grange in 1889. This was only one of many fruit, vegetable, and nut cooperatives sponsored by the National Grange during the 1870–90 period.

Citrus and Vegetables in Florida

In Florida, the development of some early fruit and vegetable cooperatives was sponsored by the Farmers' Alliance of that State. One of these associations, the Florida Fruit Exchange, was organized in 1885, to market citrus fruit. Another, the Farmers' Alliance Exchange, organized in 1886 to sell vegetables for its members and fill orders for supplies.

The Florida Highland Fruit Growers Association formed in the 1880's to market a variety of fruits. Citrus producers of 1891 were represented by such marketing agencies as the Orange and Vegetable Growers' Auction Co., and the Florida Orange Growers' and Dealers' Protective Union, but almost 20 years were to pass before citrus growers established a marketing organization—The Florida Citrus Exchange, Tampa, Fla., patterned after the California system of exchanges.

Apples in the Northwest

Apple marketing cooperatives in the Pacific Northwest can trace their beginnings to the Hood River Fruit Growers' Union, Hood River, Oreg., formed in 1893 to market strawberries, cherries, and blackberries. Ten years later the Hood River Apple Growers, Hood River, Oreg., incorporated.

These organizations operated side by side after Hood River Apple Growers organized, and one manager served both associations. This continued until 1913, when one of the first consolidations recorded among fruit and vegetable cooperatives took place, and the associations joined to form the Apple Growers' Association of Hood River.

It was during the first decade of this century that other growers in the Northwest organized marketing cooperatives. Although apple marketing cooperatives are currently active in many areas of the United States, development before 1913 was most significant in the Northwest.

Potatoes in Many States

Interest in cooperative marketing of potatoes developed among Michigan potato growers early in this century. It was not until 1918, however, that a number of local associations were formed and in turn organized the Michigan Potato Growers' Exchange, Traverse City. In this association's third year of operation, 129 locals used its seed, traffic and claims, sales, auditing, accounting, and purchasing departments. Although the Exchange has gone out of business, several locals continue to operate in Michigan.



Mechanical methods for cleaning and separating walnuts began to be used as local associations federated in 1912 to form the California Walnut Growers Association, now Diamond Walnut Growers.

After these beginnings in Michigan, cooperative potato associations developed in Colorado, Maine, Pennsylvania, Idaho, and Florida. Most of this activity took place in the early 1920's, although the Aroostook Potato Growers' Association, Presque Isle, Maine, was active in the 1911-15 period. Most of these associations were not limited to performing marketing functions but also served their members by purchasing supplies and seed potatoes.

Produce in Virginia

Produce has always required specialized marketing services and a large variety of supplies. Produce growers of 1899 on the Eastern Shore of Virginia were totally without adequate facilities and services. They found returns for produce so low that they organized

the Eastern Shore of Virginia Produce Exchange at Onley, Va.

After its incorporation in 1900, the Exchange grew and prospered as it brought to the area standardization of products, a demand for Exchange brands, information about desirable varieties, improved railroad facilities, and direct representation in many large cities.

Changing patterns of production, good roads, and growers' direct sales to buyers all contributed to the Exchange's decline as a marketing organization, and in 1955 the facilities were sold to a commercial firm. This ended one of the longest continuous cooperative produce operations in this country.

Nuts in California

Nut growers in California were among the early cooperators form-

ing the Nielos and Ranchita Walnut Growers in 1887. Just before the turn of the century, a number of walnut marketing associations were formed. In 1912 many of these local associations federated to form the California Walnut

Growers Association, now known as Diamond Walnut Growers, of Stockton, Calif. Similarly, almond growers formed a federated marketing agency in 1910 that is still known as the California Almond Growers Exchange, Sacramento.

Growth in Numbers and Business Volume

A 1913 survey of the U.S. Department of Agriculture listed 456 cooperatives marketing fruits and vegetables valued at \$70 million.

In 1915, a more comprehensive study showed 871 fruit and vegetable marketing associations with a membership of 110,000. Their annual business amounted to \$202 million. Only 4 of the then 48 States reported no organized fruit and vegetable marketing associations.

Peak Number Reached in 1930-31

The peak in number of fruit and vegetable marketing cooperatives was reached in 1930-31 with 1,386 associations reporting to the U.S. Department of Agriculture. Although there has been a decline in numbers ever since, total business volume—then estimated at \$283 million—has increased almost steadily.

Similarly the peak in number of nut cooperatives was reached in 1930-31, with 71 reported. This number has declined almost constantly, but annual volume of business, then estimated at \$13 million, has increased manyfold.

Present Trends

The number of fruit and vegetable cooperatives has decreased al-

most constantly since 1950-51 (table 7), when 825 were reported. With 654 reporting in 1961-62, number of associations had declined 21 percent. Memberships during this period showed a decline of 22 percent.

Also during this period the number of nut cooperatives declined from 40 to 29, or 28 percent (table 8). However, memberships in nut associations declined less than 6 percent, although number of memberships showed marked variation from year to year. This may have been due in part to a number of cooperatives in this group that operated under price stabilization programs.

Despite the declining number of associations and memberships, value of fruit and vegetable sales by cooperatives has increased in all but three of the last 11 years. Decreases in value of sales, when they occurred, have been small, and overall trends indicate a doubling of sales over a 12- to 15-year period.

Numbers of fruit and vegetable cooperatives, as well as memberships in these associations, are decreasing much more rapidly than among all marketing cooperatives. On the other hand, the percentage increase in value of sales among fruit and vegetable associations is

greater than the increases for all cooperatives engaged in marketing farm products.

These opposing trends—decreasing numbers of associations versus increasing value of sales—are re-

lated to the changing market structure of food retailing. Probably no group of commodities handled cooperatively has been more affected by changes in food marketing than fruits, vegetables, and nuts.

Table 7.—Estimated number of associations and memberships of cooperatives handling primarily fruits and vegetables, and value of fruit and vegetable sales by all cooperatives, 1950-51 to 1961-62

Period	Associations	Memberships	Value of all fruit and vegetable sales ¹
	<i>Number</i>	<i>Number</i>	<i>1,000 dollars</i>
1950-51-----	825	138,628	552,641
1951-52-----	825	139,237	596,537
1952-53-----	776	133,782	590,497
1953-54-----	755	131,682	610,409
1954-55-----	734	126,415	675,566
1955-56-----	730	123,635	723,272
1956-57-----	725	128,590	723,269
1957-58-----	738	126,705	823,926
1958-59-----	740	126,165	892,320
1959-60-----	702	114,775	941,811
1960-61-----	671	109,135	941,421
1961-62-----	654	108,510	1,002,338

¹ More than 99 percent of the value of fruit and vegetable sales by all cooperatives were made by associations specializing in these products

Table 8.—Estimated number of associations and memberships of cooperatives handling primarily nuts; and value of nut sales by all cooperatives, 1950-51 to 1960-61

Period	Associations	Memberships	Value of all ¹ nut sales
	<i>Number</i>	<i>Number</i>	<i>1,000 dollars</i>
1950-51-----	40	58,941	113,485
1951-52-----	42	43,312	92,367
1952-53-----	40	35,241	55,216
1953-54-----	39	47,786	83,850
1954-55-----	37	41,510	46,273
1955-56-----	37	47,240	91,238
1956-57-----	36	54,705	96,211
1957-58-----	36	56,135	93,072
1958-59-----	34	61,490	109,493
1959-60-----	33	59,140	114,533
1960-61-----	30	54,480	124,152
1961-62-----	29	55,760	117,380

¹ In recent years, associations specializing in these products were responsible for 70 percent or less of the value of nut sales by all cooperatives.

Marketing Developments Since 1900

ALTHOUGH a number of early cooperative fruit, vegetable, and nut associations supplied their grower members with a variety of marketing services, most organizations at the turn of the century were performing only the basic functions of assembling, packing, and arranging to get the crop to market.

Some marketing organizations continue to perform only basic services, but most cooperatives today recognize the need for extending better services to both growers and consumers.

Changes in the marketing of these commodities came slowly at first. As growers gained experience with cooperative marketing of their fruits, vegetables, and nuts, they began to see the need for better transportation, improved standards and grading, more adequate market information and improved facilities for storing and processing.

Effective cooperative marketing, it was soon discovered, required adequate representation in the marketplace. For many associations, this meant establishing sales offices in major markets. Some local associations of growers joined with similar groups to form federated sales agencies.

These federated organizations often provided many additional services, such as traffic and claims or supply and credit departments. Many of them have long histories including successful attempts to modernize their services.

Consumers a Factor in Market Changes

As the century progressed, changes in marketing fruits, vegetables, and nuts came at an accelerated pace.

The American family was one of the causes for these changes. For the first time, the Census of 1920 showed urban population outnumbering rural. Size of family was also declining. Working wives, or homemakers seeking more leisure time, created a demand for products in processed form.

Mechanical refrigeration, and many other labor saving devices, helped develop new demands for food products.

More attention to packaging and quality of fresh produce was a natural outgrowth of these developments. But more important was the development of cooperative processing.

Cooperative processing on a large scale began after 1910 with dried fruits—principally prunes, peaches, and apricots from California. So far as the grower was concerned, drying extended the marketing season and homemakers had new opportunities to use these fruits for nutritious meals.

Cooperative canning developed substantially after 1930. Approximately 88 cooperatives engaged in canning fruits and vegetables in 1939, and during World War II cooperative canning operations expanded greatly.

Although total number of canning companies in the United States decreased substantially in

the period 1948-63, cooperatives engaged in canning were estimated to number more than 70 in 1963. Cooperatives participated in much of the technological advancement made in canning to improve quality and create products more useful to busy homemakers.

Frozen fruits and vegetables were gaining consumer acceptance in the 1930's. However, development of the frozen food industry was set back by the war years, because of scarcities of material needed for processing facilities and retail and home freezer cabinets.

A national survey of fruit, juice, and vegetable freezers in 1959 listed 40 cooperatives. However, relatively few associations are exclusively freezers. Of the six cooperative processors of frozen concentrated citrus juices in Florida, for example, five are also canners of single strength juices or sections.

Frozen concentrated orange juice is an outstanding example of the quality and convenience processors offer homemakers. Citrus growers have in turn benefited as consumers increased their consumption of oranges in this processed form.

Influence of Supermarkets

Further cause for changes in fruit, vegetable, and nut marketing can be found in the development of the supermarket and the self-service method of retail merchandising. In the early 1930's, these self-service supermarkets began to show their strength; but their most rapid growth was to come in the post World War II period.

From 44 percent in 1952, supermarkets grew to claim 75 percent of total grocery store sales in 1962.



Growers can merchandise their products effectively in supermarkets through attractive displays set up by their own organizations. This display was successfully and jointly used by Sun-Sweet Growers and Sun-Maid Raisin Growers.

In addition, sales have been concentrated among a relatively few large chains.

These changes in food retailing have made many demands on grower associations. Chainstores require high-quality, uniformly graded, and attractively packaged produce in large volumes. Containers must be of a size to suit the homemakers' needs and attractive enough to sell the contents from a self-service display.

Terminal-market fruit auctions, which once accounted for large volumes of fresh sales, are now bypassed by most of the large retail food chains, except for fill-in purchases. For example, only 14 percent of Florida's fresh oranges moved through terminal auctions in the 1961-62 season, compared with 41 percent in 1940-41.

Many cooperative fresh fruit and vegetable sales are now made in the production area after direct contact with the buyer's representative.

Merchandising has become a fine art in supermarket retailing, and many marketing cooperatives are spending large sums for advertising and promotional efforts in support of well-established brands.

Many processing cooperatives pack under private labels promoted by leading grocery retailers.

Buyer-label sales do not require the expense and promotional effort associated with packer-label sales, but returns reflect these reduced costs.

Present-day mass merchandising requirements for fresh produce of uniform and preferred sizes has led many cooperatives to establish processing outlets to handle off-sizes and surpluses.

Some products in sizes rejected by domestic buyers have been successfully exported by cooperatives to foreign markets.

Present-day marketing methods, along with new emphasis on diets and food values, have encouraged cooperatives to make new research and development efforts. Results have come in the form of new products, new product uses, and reduced costs that have benefited both grower and consumer.

Commodities Handled

FROM the beginning, most fruit, vegetable, and nut growers organized marketing cooperatives along commodity lines. The exception—multi-commodity cooperatives—seemed to be mostly among deciduous fruit growers.

Later, as some associations extended their operations to include canning and freezing, they began to handle more diverse commodity lines. However, cooperatives still specialize chiefly by commodity, and are commonly referred to as citrus, apple, potato, or other commodity associations.

Citrus Fruits

During the 1960-61 season, 147 citrus associations were active. It

is estimated that these cooperatives had \$502 million in gross sales during that season. Citrus commodities handled included grapefruit, lemons, oranges, murcotts, tangerines, and tangelos.

Of the total only eight of these cooperatives were processing—with six producing frozen orange juice concentrate. In 1959, the six accounted for 26 percent of total production of this product, produced chiefly in Florida.

Citrus cooperatives provide many services for their grower members. Most provide basic services such as grading and packing. Others have fully integrated operations from tree nurseries to product and byproduct processing.

Local cooperatives can, and do, successfully provide such fully integrated services, but more often these are provided through federated or centralized associations.

In California and Arizona

Sunkist Growers, Inc., Los Angeles, Calif., is one of the best-known federations of citrus cooperatives. Composed of 112 local units—including cooperatives and large grower shippers—Sunkist has served citrus growers in California and Arizona for 70 years. Sunkist markets 70 percent of all fresh citrus coming from this area.

Market representation is achieved through a network of sales offices in important markets across the country. Fresh citrus sales are supported by Sunkist's large-scale brand advertising and merchandising programs. Other related member services include traffic and claims and market information.

Sunkist processes and markets about two-thirds of all the orange and lemon products produced in the California-Arizona area, substantially enhancing returns to growers.

Its export program for fresh and processed products has further improved growers' returns. Its research efforts have improved products and marketing opportunities, and it has made much important scientific and technical knowledge available to the food and chemical industries.

The California-Arizona citrus area has one other federated sales organization, Pure Gold, Redlands, Calif. In 1962, this 56-year-old cooperative served 13 local cooperatives and large grower shipping organizations, providing them marketing services and packing-house supplies.

Only a few California citrus cooperatives market fruit independently. Most of these independent associations are well-established fresh-fruit houses.

In Florida

The Florida citrus industry is affected in many ways by cooperative activity. However, in contrast with California many Florida cooperatives market fresh fruit independently, and the proportion of both fresh and processed products marketed cooperatively is smaller.

Approximately 3,000 Florida growers market fresh citrus through 28 local packing associations. Seventeen of these are members of the Florida Citrus Exchange, Tampa, a federated sales

The Sunkist label is stamped on fruit by the marking machine after passing the rigid requirements established by Sunkist Growers.





Florida's largest citrus sales cooperative, the Florida Citrus Exchange, ships substantial quantities of fresh fruit abroad. John T. Lesley, General Manager of the Exchange, pauses here to emphasize the importance of exports.

organization founded in 1909 and patterned after the California Fruit Growers Exchange, now Sunkist.

In addition to local cooperatives, grower shippers also use the services of the Exchange.

A subsidiary, Seald-Sweet Sales, Inc., was established in 1952 to more closely identify sales with the Exchange's famous trademark, Seald-Sweet. Seald-Sweet volume represents from 25 to 30 percent of all Florida fresh citrus sales.

Other Exchange subsidiaries offer members credit services and packinghouse supplies.

The Exchange maintains an active export department, and a subsidiary offers a terminal market prepackaging service to buyers in many northern markets.

Eleven Florida shipping associations operate their own independent sales departments. Many local cooperatives, including those affiliated with the Exchange, offer grower members a wide range of services from grove care to processing outlets. These services often include cooperative procurement of fertilizer, spray materials, and other grove supplies.

Virtually all frozen orange juice concentrate is produced in Florida. Six cooperatives process this product. Four of these also process single-strength citrus juice or sections. Two of these cooperative processors have direct grower membership, and four are federations of local associations and packer shippers.

Citrus processing cooperatives in Florida have worked toward establishing their own brands, but they have remained among the most important suppliers of customer-branded frozen orange juice concentrate.

Some of these processing organizations have effectively increased sales by cultivating export markets. Europe has proven an excellent outlet for single-strength juices, with one association reporting sales of more than 425,000 cases, chiefly in Western Europe during the 1961-62 season.

In Texas

After a succession of disastrous freezes in Texas, cooperative mar-

keting is confined to three associations. The extent of cooperative marketing activity in the next few years will probably depend on the ability of growers to assemble enough tonnage to efficiently operate present facilities.

Deciduous and Other Noncitrus Fruits

In 1962, a total of 284 cooperatives specialized in handling deciduous and other noncitrus fruits. These fruits include principally apples, apricots, avocados, cherries, cranberries, dates, figs, grapes, nectarines, olives, peaches, pears, plums, prunes, and strawberries.

Some associations handle only one commodity, such as apples, or peaches, but some successfully handle a large variety of fruits. In addition 61 associations handle fruits in combination with vegetables.

Apples

Apple production in this country exceeds that of all other fruit except oranges and grapes, but apples are produced on a commercial scale in more States than either of these other commodities. Cooperatives serve apple growers in many States, from Maine to California.

More than 60 percent of the U.S. commercial apple crop is consumed in fresh form. Cooperatives cater to this fresh market, providing growers with services designed to meet the demand for fresh apples. Small New England associations provide primarily grading, packing, and storage services.

In New York, New Jersey, Pennsylvania, Virginia, North Carolina, and Georgia, sales are an important service offered by cooperatives along with packing,

grading, and storage. Three North Carolina associations have been formed since 1957 to pack and sell growers' apples in an area of expanding early production. Georgia apple growers are making more use of existing farm supply organizations to market early fruit.

Apple growers in the Pacific Northwest have cooperatively marketed their products since the beginning of this century. Over this period growers have sought the best methods for handling their fruit, but cooperatives emerged as efficient and successful leaders.

Associations in this area led the shift from ranch to shed packing, and this in turn hastened development of grades and standards. The practice of building cold-storage facilities at shipping point and providing educational field services to growers in the area were innovations credited to cooperatives.

Two cooperative federations in Washington are combining the production of individual apple associations to meet the large volume requirements of today's mass merchandising retail food outlets.

One of these, Wenatchee-Okanagan Cooperative Federation, Wenatchee, Wash., sells its combined output through an independent broker. The other is the marketing department of Northwest Wholesale, Inc., Wenatchee, Wash., a farm supply cooperative. Each group has about 13 member associations.

Modern marketing practices undoubtedly contributed in large measure to the acceptance and reputation of northwestern apples in eastern and world markets. Exports are important for many of

these associations. The Apple Growers Association, Hood River, Oreg., reports that approximately 35 percent of its members' apple production goes to export markets.

Export sales by apple cooperatives in the Northwest form a substantial part of the total U.S. apple export volume. Since export markets prefer the sizes and grades that are not in demand in this country, growers benefit, especially with generally favorable export prices.

Cooperatives provide marketing services to apple growers in other Western States including California, Colorado, Idaho, and New Mexico. In the Midwest, apples are marketed cooperatively from Illinois, Iowa, Kansas, Ohio, Wisconsin, and Michigan.

The Illinois Fruit Growers Exchange, Carbondale, once a 23-member federation of fruit exchanges, now operates as a local association. The decline in number of exchanges was due to improved roads and available truck transportation that generally affected marketing patterns in areas where fruit production was widely scattered. However, the remaining local association offers growers storage facilities and marketing services, and presently sells in excess of 1,200 cars annually, mostly apples and peaches.

Cooperatives in Ohio and Kansas, like those in Illinois, handle apples mostly for fresh market. In Michigan, 10 growers' associations handle apples for either fresh or processed markets. Apples processed cooperatively in Michigan are mostly frozen with Millburg Growers Exchange, Benton Harbor, Mich., a leading freezer since 1947.

Apple processing is important business for cooperatives in widely scattered States from Pennsylvania to California.

In California for instance, cooperatives dry and freeze apples.

Knouse Foods, Inc., Peach Glen, Pa., is an example of an important cooperative that packs apples in a variety of forms including sliced apples, applesauce, apple juice, apple butter, pie fillings, jellies, and apple specialty products.

In the Pacific Northwest, where much attention has been given to markets for fresh apples, the Apple Growers Association, Hood River, Oreg., also cans apples in a variety of products, from sauce to juice.

Buyers want a complete line of products, and the multiproduct approach to processing supplies this demand. In many of the cooperatives that handle apples, either fresh or processed, other fruits help to fill out product lines. Soft deciduous fruits are the products most often handled in combination with apples.

By increasing the number and variety of commodities handled, either fresh or processed, these associations extend their merchandising efforts. A diverse product line, for instance, makes for more effective use of the nationally prominent Lucky Leaf label of Knouse Foods.

Apples are also merchandised effectively in fresh markets where cooperative brands have gained national and international prominence.

Skookum Packers Association, Wenatchee, Wash., for example, is currently celebrating the 50th anniversary of its famous Skookum brand.



Cooperative members watch their Golden Delicious apples start through the washing line of Skookum Packers. Close attention to quality has created a good brand image—"Skookum"—for this association.

Yakima Fruit Growers Association, Inc., Yakima, Wash., has similarly made effective use of its Big Y brand, and the Nuchief brand symbolizes quality fruit from Northwest Wholesale, Inc., Wenatchee, Wash.

Berries

Both strawberries and bush berries are marketed in volume by cooperatives. Many small associations provide marketing services to growers who specialize in growing one type of berry. In Maine, for example, growers of wild blueberries operate cooperative processing associations; and in Michigan, New Jersey, and North Carolina, growers of cultivated varieties cooperatively market fresh blueberries.

Strawberries are marketed cooperatively in many States, frequently along with some other seasonal fruit or vegetable product.

A leading cooperative in strawberry marketing is Naturipe Berry Growers, San Jose, Calif. For more than 40 years this grower association—formerly called Central California Berry Growers Association—has worked to improve its marketing operations and searched for improved strawberry varieties and better handling methods. It led in establishing uniform standards and operating precooling facilities.

Naturipe was a pioneer in developing consumer-size packages that could be packed in the field and would meet the requirements of

shipping for extended distances. This cooperative established freezing facilities that produce a high-quality pack under continuous inspection by the U.S. Department of Agriculture. They also market raspberries under the Naturipe label.

Oregon and Washington cooperatives are important in marketing and processing bush berries, including red raspberries and blackberries. Many associations both can and freeze a variety of berries, including strawberries, as well as other fruits and vegetables.

Some berry processing associations are members of North Pacific Cannery and Packers, Inc., Portland, Oreg. North Pacific is a five-member sales federation that markets a complete line of berries and other important fruits and vegetables, in both canned and frozen packs.

Grapes

Grapes reach the market as fresh fruit, or in the form of raisins, grape juice, wine, or brandy. A total of 41 cooperatives handle grapes in fresh or processed form.

Cooperatives handle large volumes of fresh table-variety grapes. The California Fruit Exchange, Sacramento, alone accounted for the shipment of 29,418 carloads of table grapes in 1962.

Cooperatives in New York, Pennsylvania, Michigan, Washington, Arkansas, and California process grapes for juice.

The largest of these associations is the National Grape Cooperative Association, Inc., Westfield, N.Y., owner of the Welch Grape Juice Company. Welch operates plants in five of the important juice grape States and markets a variety of

grape products in addition to juice and frozen concentrated juice.

Merchandising has played an important role in the national prominence of the Welch label. In contrast, many smaller grape processing cooperatives have marketed their products under buyers' labels.

In California, the chief grape producing State, cooperatives are famous for two other processed grape products—raisins and wine.

Sun-Maid Raisin Growers of California, Fresno, is the leading raisin marketing organization, serving more than 3,000 growers. This cooperative was responsible for much of the early work in developing machinery for cleaning and destemming raisins as they came from the growers' drying trays.

It has developed new products and byproducts along with improved consumer packages. A large advertising budget has made the Sun-Maid brand well and favorably known throughout the world.

Any kind of grape is suitable for wine, although some varieties are more desirable than others. Crop size and existing price relationships may divert grapes from fresh and raisin markets to wineries, causing irregular production schedules and frequent surpluses.

Cooperative wineries, and their marketing associations, have endeavored to bring order to this troublesome market condition through regulation of supply and merchandising.

Allied Grape Growers, Madera, Calif.; the California Wine Association, San Francisco, Calif.; and the Guild Wine Company, Lodi, Calif., are prominent in this marketing effort. These three associa-

tions market a substantial share of California's wine production.

Allied's operating and sales subsidiary, United Vintners, alone was responsible for 20 percent of the grapes crushed by all California commercial wineries in 1962.

Much of Allied's success is directly related to emphasis on product quality. Fieldmen keep in close touch with grower members. Sugar content of grapes must meet predetermined standards, or growers' returns will be reduced accordingly; and grapes not meeting high standards for wine are diverted for distilling material.

Furthermore, every step in the wine-making process, from the crushing of grapes to the bottling of the finished product, is subject to quality control and continuing research for better methods.

Soft Deciduous Fruits

Soft deciduous fruits include apricots, cherries, nectarines, peaches, pears, plums, and prunes. Many of these fruits—particularly peaches, pears, and cherries—are handled by associations that also handle apples or other fruits or vegetables.

Some grower associations, however, specialize in marketing primarily one deciduous fruit. Examples of specialized operations of this type can be found in widely separated sections of the country. In Georgia and South Carolina, peach growers have built reputable packing and sales organizations. In California, pear growers continue to use the specialized packing services of two local associations.

These pear-packing associations in California do not operate their own sales departments. Instead, along with more than 60 other

cooperatives and grower shipping organizations they sell their fruit through the California Fruit Exchange, Sacramento.

The exchange is one of the oldest cooperatives serving fruit growers in this country. It operates as a federated sales agency, with a few specialized facilities directly serving growers in areas where no member association exists. In addition to a wide variety of soft deciduous fruit, the Exchange also markets a large volume of grapes and strawberries and some apples under its famous Blue Anchor label.

The Exchange is also active in export markets. It has a traffic and claims department, a supply and purchasing department, and an active work force in dealer service and trade promotion. Dealer service work has supported Blue Anchor brands for more than a quarter of a century.

Although California is a major producer of soft deciduous fruits it has much competition. In the Northwestern States, peach, pear, plum, prune, and cherry growers make liberal use of cooperative marketing methods. Marketing and processing organizations often handle these commodities along with apples or berries, developing multicommodity lines to better exploit a quality brand name and more efficiently use facilities and specialized services of a skilled management team.

Cooperative marketing of soft deciduous fruits is also important in the Lake States where they are most often handled along with other fruits. Processing is important for several cooperatives in these States.

Cherry Growers, Inc., Traverse

City, Mich., is an example of an association that both cans and freezes its principal commodity, cherries, but it also freezes substantial quantities of apples.

On the West Coast, numerous cooperatives process soft deciduous fruits in combination with other fruits or vegetables. Some both can and freeze.

Many soft deciduous fruits are processed in dried form. Raisins and prunes are the most important dried fruits.

Fruit drying is one of the oldest cooperative ventures. Because the climate was ideal, and the fruit was readily available, California became the center of fruit drying activity. Despite the relatively recent development of artificial means of drying fruit, over 80 percent of all dried fruit produced in the United States in 1962 was processed in California.

California cooperatives have been leaders in the dried fruit field. Most of the 44 drying associations reported in 1962 were located in California.

Sunsweet Growers, Inc., San Jose, Calif., a federated cooperative with 25 local associations representing 4,000 growers, is a leader in the dried fruit industry. Sunsweet prunes, apricots, and peaches are known the world over for uniform appearance and quality. Backed by a strong merchandising program, Sunsweet has been an innovator in export markets, product development, and modern packaging.

Other Fruits

A number of other fruits, including avocados, cranberries, dates, melons, and olives are cooperatively marketed in large quantities.

Many of these are subtropical fruits, produced and marketed in specialized areas by highly specialized growers.

Avocados. The avocado crop, which fluctuated between 78,000 and 37,000 tons annually during the 5 years, 1958-62, owes its existence as a commercial venture largely to cooperative enterprise. This accomplishment has come mostly through effective promotion in merchandising the avocado which until recently was regarded as a rare tropical fruit.

Packing and merchandising avocados is the highly specialized business of the 2,600-member grower association, Calavo Growers of California, Los Angeles.

To help their far-flung marketing organization operate more efficiently, Calavo has taken on a line of companion products, including dates, figs, limes, and pineapples. These companion lines help offset merchandising costs and increase avocado sales.

Cranberries. Cooperatives have demonstrated aggressive leadership in merchandising the cranberry crop in fresh and processed forms. Formerly regarded as a holiday item, cranberries are now consumed year round. This development resulted from cooperatively fostered merchandising and technical improvements in both fresh and processed product.

These improvements range from replacement of the bulky, 24-pound wooden box of the past with convenient and attractive consumer-size packages, to newly developed processed products such as cranberry juice cocktail.

Foremost in these developments is Ocean Spray Cranberries, Inc., Hanson, Mass. This association,

with processing plants in all major producing States from Massachusetts to Washington, handled an estimated 85 percent of the 1961-62 season's crop.

Dates. Well over one-third of the date crop is handled by the California Date Growers' Association, Indio, Calif. Calavo Growers also handles dates in its companion product line.

The cooperative contribution to date marketing has come in improved quality of product, use of modern sanitary methods, and improved packing equipment. Along with these improvements, cooperatives have pioneered the small consumer date pack.

Melons. Watermelons lead the list of melons marketed by cooperatives. Many of these cooperatives are sales agencies, and most are located in Southeastern, Midwestern, or Southern States.

Many watermelon associations have been formed in recent years. They demonstrate growers' recognition of the need for better price and market information along with special skills for marketing a specialized product.

Olives. Three associations of California olive growers handle more than 40 percent of all United States canning olives processed. These organizations furnish complete marketing service to their membership. Services include canning and crushing for oil in addition to assembling and grading the raw product.

The Lindsay (Calif.) Ripe Olive Company has been a most successful cooperative operation, credited with processing more than one-quarter of all U.S. ripe olives. Much of this crop has been merchandised under the Lindsay label.



Avocados, uniformly graded and sized, are being carefully packed here to meet the standards of the famous Calavo brand name.

Vegetables

In 1962, 120 associations were marketing primarily mixed vegetables. Another group of 61 associations handled vegetables in combination with fruits, and 42 handled potatoes.

Almost half the associations marketing primarily vegetables were located in California, Florida, and Texas. These States are important in vegetable production, particularly for fresh market, because of their warmer climates and longer growing and shipping seasons.

White Potatoes

Cooperatives serve growers in all the important white potato produc-



Ocean Spray Cranberries are prominently featured among the promotional material used by the Cranberry Institute in launching its American Cranberry campaign in London. Paul J. Findlen, Agricultural Attache, and Joseph G. Knapp, Administrator, Farmer Cooperative Service, USDA, discuss the campaign.

ing States. These organizations provide a wide range of services from grading, packing and storage, to processing and sales.

An example of a multiple service potato association is Idaho Potato Growers, Inc., Idaho Falls. Marketing fresh table stock potatoes has been a major function of this cooperative since its organization in 1922. Marketing in this case means storing, washing, packing, loading, and selling.

To extend the market for its members' potatoes, the cooperative in 1943 built a dehydrating plant to supply the war needs of the Federal Government. Facilities for making starch were added in 1948. Then in 1956, frozen french

fries became a part of the product line. These are packed in institutional sizes.

Idaho Potato Growers markets in excess of 6,000 carlots of potatoes annually through its fresh and processing operations. This association has demonstrated an ability to keep pace with, or ahead of, the movement toward increasing consumption of white potatoes in processed form.

Potato cooperatives often perform marketing services for growers of other crops such as onions and cabbage.

Colorado Potato Growers Exchange, Denver, Colo., is an example of this type of operation handling a combined tonnage of pota-

toes and onions in excess of 5,000 carlots annually.

Two Florida early potato associations, Florida Planters, Inc., and Hastings Potato Growers Association, both of Hastings, market cabbage for their members.

In Maine, a number of cooperatives provide services to potato growers. Maine Potato Growers, Inc., Presque Isle, handles more than 5,000 carlots of potatoes annually, and also markets oats and eggs. A purchasing division handles farm machinery, fertilizer, petroleum, and feed, and a bag division manufactures bags for a variety of uses.

Sweetpotatoes

Production of sweetpotatoes in recent years has been accompanied by a declining consumption of fresh, and an increasing consumption of the processed, product. In addition, competition between growers and shippers in different production areas has increased.

A number of sweetpotato improvement associations have been formed in various production areas in an effort to promote more suitable varieties and improved cultural practices. Improved marketing methods have also received much attention.

These efforts to solve marketing problems have led growers in California, Georgia, Louisiana, and Virginia to organize five sweetpotato marketing cooperatives since 1959. These all ship to fresh markets. Associations handling sweetpotatoes generally handle other commodities grown in the production area, such as berries, melons, or mixed vegetables, although some specialize in only the one commodity.

Mixed Vegetables

Most cooperatives that specialize in marketing vegetables handle them for fresh markets. Although some specialize in one commodity, most handle a number of vegetables, and some market a complete line of produce.

Among associations that specialize, such crops as lettuce, celery, and tomatoes are often the high-volume item. Cooperatives also specialize in handling such crops as artichokes, brussel sprouts, and mushrooms.

The changing market structure for food retailing has directly affected vegetable growers and their cooperatives. Buyers for mass-merchandising retail food stores want quality produce, uniformly graded and packed. Frequently they want this in consumer-size packages.

In order to fulfill their primary requirements, these large-volume buyers go directly to shippers in production areas. In so doing, the small volume outlet is frequently bypassed.

Cooperatively-operated shipping point auctions are one of the casualties of these developments. Like the terminal market fruit auctions, many have disappeared. Of those shipping point auctions that continue in operation, many provide growers with other services including direct sales to buyers in distant metropolitan areas. This is typical of some cooperative auction markets in New Jersey.

Large volume requirements mean large-volume marketing organizations. Some vegetable cooperatives operating in California and Florida handle as many as 5,000 to 6,000 carlots of produce annually. These include Salinas

Lettuce Farmers Co-op, Salinas, Calif., and Lake Shore Growers Cooperative and Pioneer Growers Cooperative, both of Belle Glade, Fla. None of these organizations has more than two dozen members and each handles a large variety of vegetables. For example, Pioneer in a recent season handled 27 different commodities.

These organizations wash, grade, and pack their growers' products, hydrocool much of their output, and prepackage selected items. But their most important service is selling. Their salesmen are highly skilled. They maintain radio contact with their field crews, and a buyer's telephone call can mean that salad greens still in the field will shortly appear on the supermarket shelf.

Handling mixed vegetables in this way has advantages for everyone. By diversifying his production, the grower is in a better position to weather adverse conditions affecting any one crop. A wide range of crops allows some cooperatives to keep offices and facilities operating for an extended period. Over most of the season, buyers have the advantage of one-stop shopping for their major produce needs.

Another approach to cooperative vegetable sales has been made by a group of grower-shippers in the Salinas, Calif., area. In 1962, these shippers formed Mutual Vegetable Sales, Inc., to market an expected crop of 9,500 cars of lettuce and 500 cars of celery and miscellaneous vegetables.

These shippers, including one cooperative packer, harvest, pack and precool their crops under their own labels. Buyers calling this sales office find the quality and

pack of lettuce they want, and shippers benefit from these wide market contacts.

Vegetable associations located near large urban centers in the Northeastern and Central States, serve growers whose operations are generally smaller than those in more distant areas.

Handling perishable fresh market vegetables for a large number of smaller growers presents these cooperatives with the problem of scheduling deliveries. Some associations use a membership agreement that places daily acreage limitations on planting to gain more even distribution of crop maturities.

To gain more uniform crops, variety of seed may be specified. Attempts also are made to fix the time and place of delivery, but effective coordination of production and sales is usually dependent on a good working relationship between the grower and his association.

These problems are much more acute for vegetable growers in Hawaii because the 50th State is a self-contained, or "pocket" market in which a shortage or a surplus can severely affect price levels.

The Maui Farmers Cooperative Exchange (FCX) Hawaii, the oldest of a number of local fruit and vegetable cooperatives, has effectively met this problem with monthly meetings to plan requirements for the next month.

Production planning is carried out for major commodities by committees of three board members, who are also growers of the crop. Market reports and production statistics are used extensively as these committees work with growers.

The Hawaii Farmers Cooperative

Association, Honolulu, helps the Maui FCX in its planning activities. Committees follow up the planning process, and hired field personnel help to improve member relations.

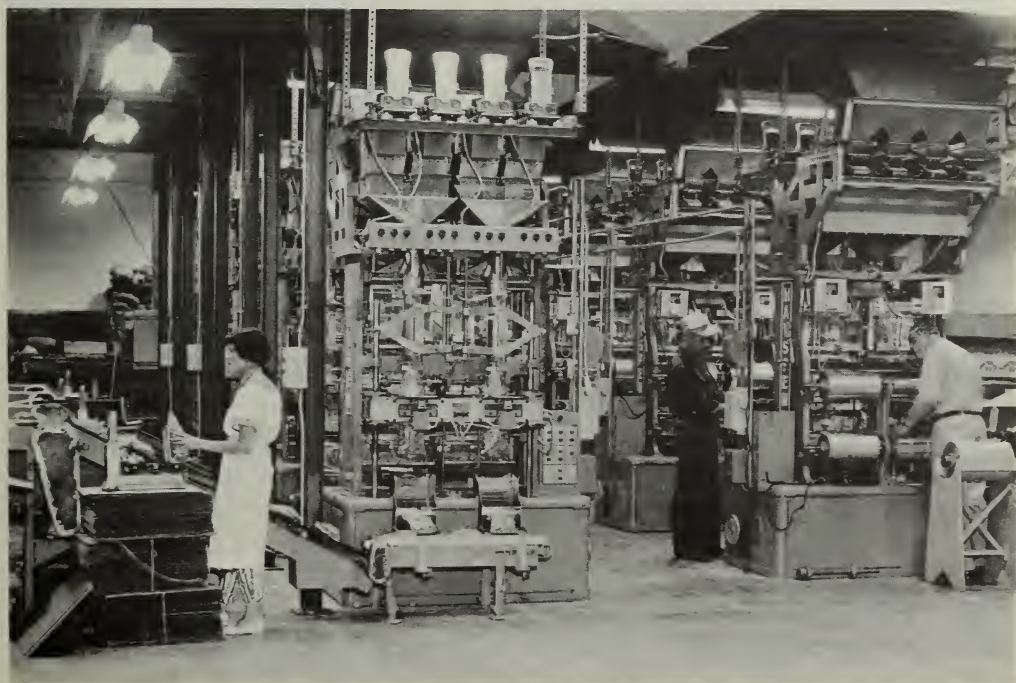
The experience of Maui FCX in coordinating production and sales illustrates how a large number of small farmers can participate in the benefits of vertical integration and still retain control of the process. However, much of their success is dependent on the attitude of mutual interest among members.

Cooperative vegetable canning operations are scattered through many vegetable production areas, including California, Oregon, Washington, and the Lake States. Cooperatives are important canners of corn and beans, and in some areas they process a wide variety of commodities. Many larger co-

operatives can both vegetables and fruits. For example, the most important product processed by Blue Lake Packers, Inc., Salem, Oreg., is Blue Lake green beans. Other vegetables are also high-volume items with this cooperative, and important fruits produced in the area are also processed in volume.

Cooperatives engaged in freezing operations in 1959 processed 9 percent of the snap beans and 10 percent of the corn. Most associations that freeze also can. Most of these were originally canners that expanded into freezing. However, Oxnard Frozen Foods Cooperative, Oxnard, Calif., was organized as a freezing operation for lima beans and a variety of other vegetables. Some of its products are canned, but it is known primarily as the world's largest packer of fresh-frozen fordhook lima beans.

Walnuts in consumer-sized packages, such as the cellophane bags being filled on these machines, account for 90 percent of all the sales by Diamond Walnut Growers.





About 70 percent of the almonds processed here by the California Almond Growers Exchange, Sacramento, Calif., are used by bakers, candy makers, and ice cream manufacturers from the cooperatively grown, harvested, and marketed crop.



Mushrooms

Mushrooms are cooperatively processed by four associations in three States. Two organizations in the Kennett Square, Pa., area and one in Michigan have been canning mushrooms for many years.

A new entry into the mushroom field is Producers Creamery Company, Springfield, Mo., a large dairy cooperative with excess manufacturing milk capacity. Producers Creamery has turned to the production of morel mushrooms, using a new culture process. This new enterprise makes efficient use of excess facilities and also utilizes milk byproducts in the culture vats where the sterile, round, stemless, and highly flavored mushrooms are produced.

Nuts

Estimates place the number of cooperatives marketing nuts in 1962 at 107. However, only 29 of these were associations whose business was predominantly marketing nuts.

California leads in the production of true-nuts. Two leading nut cooperatives in that State have processed and marketed their members' products for over 50 years. The California Almond Growers Exchange, Sacramento, was founded in 1910. Diamond Walnut Growers, Stockton, Calif., originated in 1912 as the California Walnut Growers Association.

California Almond Growers has more than 4,500 members and markets more than 70 percent of the U.S. almond crop. It provides specialized warehousing, processing, and marketing services. Marketed under the Blue Diamond label, these almonds reach consumers as

shelled or in-shell nuts. However, 70 percent of the almond growers' output reaches consumers as important ingredients of confectionery, bakery, and ice cream products.

Diamond Walnut Growers is a federation of 18 locals. It processes walnuts, packing 90 percent of its crop in consumer packs. Diamond's success as a marketing organization has come largely from developing and promoting the Diamond trademark throughout the western world.

Though active in pecan marketing only a relatively short time, cooperatives are rapidly becoming key factors in this important southern nut industry. However, many cooperatives that serve pecan growers are marketing other commodities or performing other services.

Originally organized to serve cotton growers, Cotton Producers Association, Atlanta, Ga., started marketing pecans in 1950. Cotton Producers' pecan marketing division, whose product is identified by the Gold Kist brand, handled more than 22 million pounds of nuts in its first 3 years of operation and returned savings of \$424,000 to its members. It currently markets a substantial share of the total crop from nine stations in the South and the Southeast.

Much cooperative activity associated with peanuts involves those associations that hold warehouse contracts with the Commodity Credit Corporation to store peanuts under the price support program of the Federal Government. These cooperatives were organized specifically for this purpose.

In contrast, the Cotton Producers Association entered the peanut field in 1956, providing growers in

Georgia, Alabama, Florida, and Oklahoma with complete marketing services. These services in-

clude warehousing, shelling, crushing, and marketing under the Gold Kist label.

New Developments

RECENT developments illustrate how growers have used cooperatives to adapt to the changing market structure for fruits and vegetables.

Interest in Bargaining Grows

A major development in cooperative marketing of fruits and vegetables during recent years has been the growth of bargaining cooperatives—that is, associations through which growers negotiate as a group, rather than as individuals, for price and other contract terms involved in the sale of their crops to processors.

Cooperatives of this type are not really something new. Dairy farmers have used bargaining cooperatives for many years, and the Utah State Canning Crops Association, Logan, and the California Canning Peach Association, San Francisco, date back more than 40 years.

In recent years, however, growers of fruits and vegetables for processing have increasingly explored the possible benefits that can come from cooperative bargaining, and most of the approximately 40 fruit and vegetable bargaining cooperatives were organized within the past 10 years.

In addition, the American Agricultural Marketing Association (AAMA), Chicago, Ill., an affiliate of the American Farm Bureau

Federation, has set up organizations in at least 21 States during the past few years.

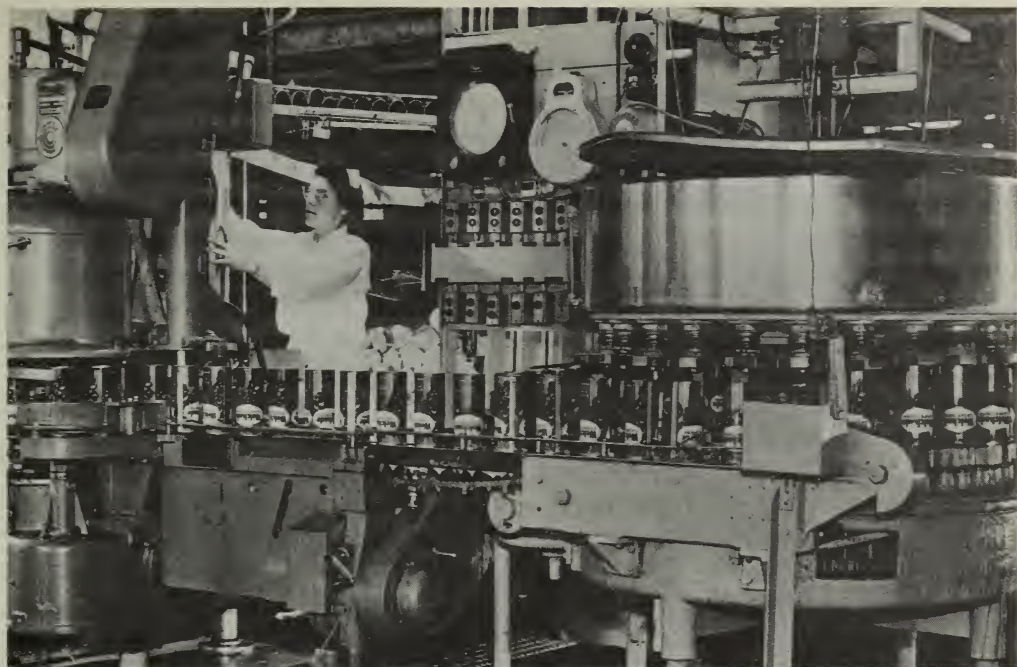
These State affiliates of AAMA help organize and assist fruit and vegetable growers in their bargaining activities, and in some places existing bargaining cooperatives have become a part of the AAMA affiliate.

Much of this interest in cooperative bargaining can be traced to major changes taking place in marketing farm products and the impact of these changes on the competitive position and income of individual growers.

Faced with the increasing “bigness” and “fewness” of buyers, member-growers of bargaining cooperatives feel they can maintain or improve their competitive positions by negotiating as a group through an association, rather than as individuals.

While located in most fruit and vegetable producing areas from coast to coast, the associations are most numerous on the West Coast. Generally, they operate within the boundaries of one State, although one association—the Great Lakes Cherry Producers Marketing Cooperative, Grand Rapids—has members in a five-State area.

Most associations deal only in one product, although some vegetable associations negotiate for several. Fruit associations have been organized by growers of peaches,



The Welch Grape Juice Company, packer of this popular grape drink and other processed grape products, is owned by grower members of the National Grape Cooperative Association, Inc., Westfield, N.Y.

pears, cherries, apples, apricots, figs, olives, grapes, and berries. Vegetable associations include growers of tomatoes, peas, sweet corn, asparagus, green beans, lima beans, cucumbers, and sweetpotatoes.

Participation-plan cooperatives are another type of marketing organization of recent interest, particularly in the Florida citrus industry. Sometimes called bargaining cooperatives, these organizations bring together growers who need a market and a processor who needs raw products. However, some are operated by processors rather than by a separate organization of growers and thus are sometimes referred to as profit-sharing plans.

Essentially such plans are designed to provide growers and processors an opportunity for

sharing risks and profits of processing and marketing. They provide for delivery of a commodity of certain specifications and for some kind of price formula. Usually provision is made for an advance payment to the grower at the time he delivers his product. There may be additional advance payments, but the final settlement is made after the processed product is sold.

Recent developments in the Florida citrus supply situation have encouraged these plans. Two cooperatives have been established recently for the sole purpose of operating participation plans. Perhaps most widely known is Florida Orange Marketers, Inc. (F.O.M.), Winter Park, Fla.

F.O.M. has a continuing contract with the Minute Maid Division of the Coca-Cola Company.

Quality Orange Growers, Inc.,

Dunedin, Fla., has a similar type contract with H. P. Hood and Sons, Inc. In both cases the processor is also a grower and as such is a member of the cooperative having but one vote the same as any other member.

In addition, Minute Maid Growers Corp., fruit growing division of Minute Maid, also has membership and one vote in F.O.M.

Growers Acquire Processing Facilities

In 1952, National Grape Cooperative Association, Inc., Westfield, N.Y., signed an agreement with Welch Grape Juice Company giving National Grape's growers an option to buy the Welch business. This included the facilities, technical know-how, and the famous Welch trademark. In 1956, the cooperative exercised that option and 4 years later was able to burn the \$15 million mortgage.

The Welch Grape Juice Company now belongs to grape growers in New York, Pennsylvania, Arkansas, Michigan, and Washington who belong to National Grape.

Acquisition of Welch for \$15 million is only a part of the story. In addition to the original purchase price, growers put up \$10 million over an 8-year period for capital improvements in the plants they were acquiring. Furthermore, repayments to growers on the allocation certificates issued in 1952 are well ahead of schedule.

The Welch acquisition is a story of grower achievement.

Shortly after the original Welch agreement was signed, a group of California bargaining associations began 4 years of study covering economic, marketing, tax, and legal

phases of the possibilities of cooperative processing.

These organizations were California Canning Peach Association, San Francisco; California Canning Pear Association, San Francisco; California Tomato Growers Association, Stockton; and California Asparagus Growers Association, Stockton. The principal sponsor was the California Canning Peach Association.

Studies made by these associations led to the organization of a new and separate cooperative, California Cannery and Growers, Inc., San Francisco. In May 1958, this new organization announced it had acquired all the common stock of the Richmond-Chase and the Filice and Perrelli canning companies for \$19 million.

Grower-members of this newly formed cooperative, now referred to as Cal-Can, furnished over \$1 million in cash as a down payment for the two processing organizations. Purchase contracts provided that one of these organizations would be acquired over a 10-year period, the other over a 12-year period. In 1959, Cal-Can acquired Thornton Canning Co., in 1960, the San Jose Canning Co., and in 1963, Schuckl and Co. Currently, steps are being taken to operate most of those facilities under the Cal-Can name.

Pro-Fac Cooperative, Inc., Rochester, N.Y., has many of the features of the National Grape and Cal-Can situations. However, the Cooperative Grange League Federation Exchange, Inc. (G.L.F.), Ithaca, N.Y. (now Agway), a farm supply organization, supplied the cooperative leadership for forming this new processing association.

G.L.F. recognized that Western New York fruit and vegetable growers had a pressing need for a strong processing outlet for their products. Providing not only leadership, but some financial assistance as well, G.L.F. early in 1961 helped these farmers organize the Pro-Fac Cooperative and raise the necessary capital to purchase four food processing plants owned by two companies.

These plants are now operated by Curtice-Burns, a company owned jointly by the former managements and G.L.F. This arrangement retains the management and sales experience so important in the packing, distribution, and merchandising of processed foods.

During 1962, Pro-Fac acquired the five plants of Haxton Foods, Inc., Oakfield, N.Y. Haxton management was retained and several key personnel assumed executive positions in the Curtice-Burns organization.

The experiences of National Grape, Cal-Can, and Pro-Fac emphasize the effectiveness of careful study of possibilities and problems before making any decisions. Careful studies by these organizations before any acquisitions were made included consideration of growers' wishes to move ahead and control the processing and marketing of their own products. Grower support was thus insured.

In addition, many of the acquired firms realized that their own resources were insufficient to satisfy the needs of large-volume buyers for continuous supplies of specified quality.

Cooperatives Merge for Marketing Efficiency

Growers are continually finding that a sufficient volume of business is necessary not only for efficient operation but for efficient marketing as well. This is particularly true when products are subjected to modern merchandising methods. Some cooperatives find increased marketing effectiveness through merger.

Many fruit and vegetable cooperative mergers have been among local fresh shipping organizations. Many of these have been between California associations. However, one 1963 cooperative merger (actually a consolidation) in California was between two well-established processing cooperatives, Tri-Valley Packing Assn., San Francisco, and Turlock Cooperative Growers, Modesto. The new organization, Tri-Valley Growers, operates 5 canning plants processing more than 300,000 tons of fruits and vegetables a year. A total of 16 separate crops go into a canned pack of over 10 million cases with an annual sales of \$50 million.

Grain Cooperatives

by Daniel H. McVey
Chief, Grain Branch

FARMERS are well represented by their own cooperatives at both local shipping points and terminal grain markets.

A total of 2,650 associations marketed grain, including soybean and soybean products, during the 1961-62 marketing year. Of this

number, 2,621 were operating at local shipping points and 29 on subterminal and terminal markets.

Only 6 of the 50 States showed no cooperative handling of grain in 1961-62. Four of these were in New England, the others were in Nevada and Hawaii. Most grain cooperatives naturally are concentrated in the heavy Midwest grain-producing areas.

Associations are classed as grain cooperatives when a majority of their total sales is derived from grain, soybeans, and soybean products. Under that classification, during the 1961-62 crop year there were 1,970 associations whose total sales were predominantly grain. Of this number, 29 were grain regionals—those operating on subterminal or terminal markets whose grain sales were mostly for local shipping point associations.

Gross sales volume in 1961-62 of these associations was over \$3.6 billion, which included the value of

grain, other farm products, and farm supplies and services. Included also were interassociation sales made by the 29 terminal marketing cooperatives amounting to \$1.1 billion. That put grain second in dollar value volume among the commodities marketed by cooperatives. It accounted for 21 percent of the net value of all farm products marketed by cooperatives in 1961-62.

From 1950-51 through 1961-62, the number of grain cooperatives declined by about 228 associations, the membership increased by some 200,000, and the gross business volume increased by almost 60 percent (table 9).

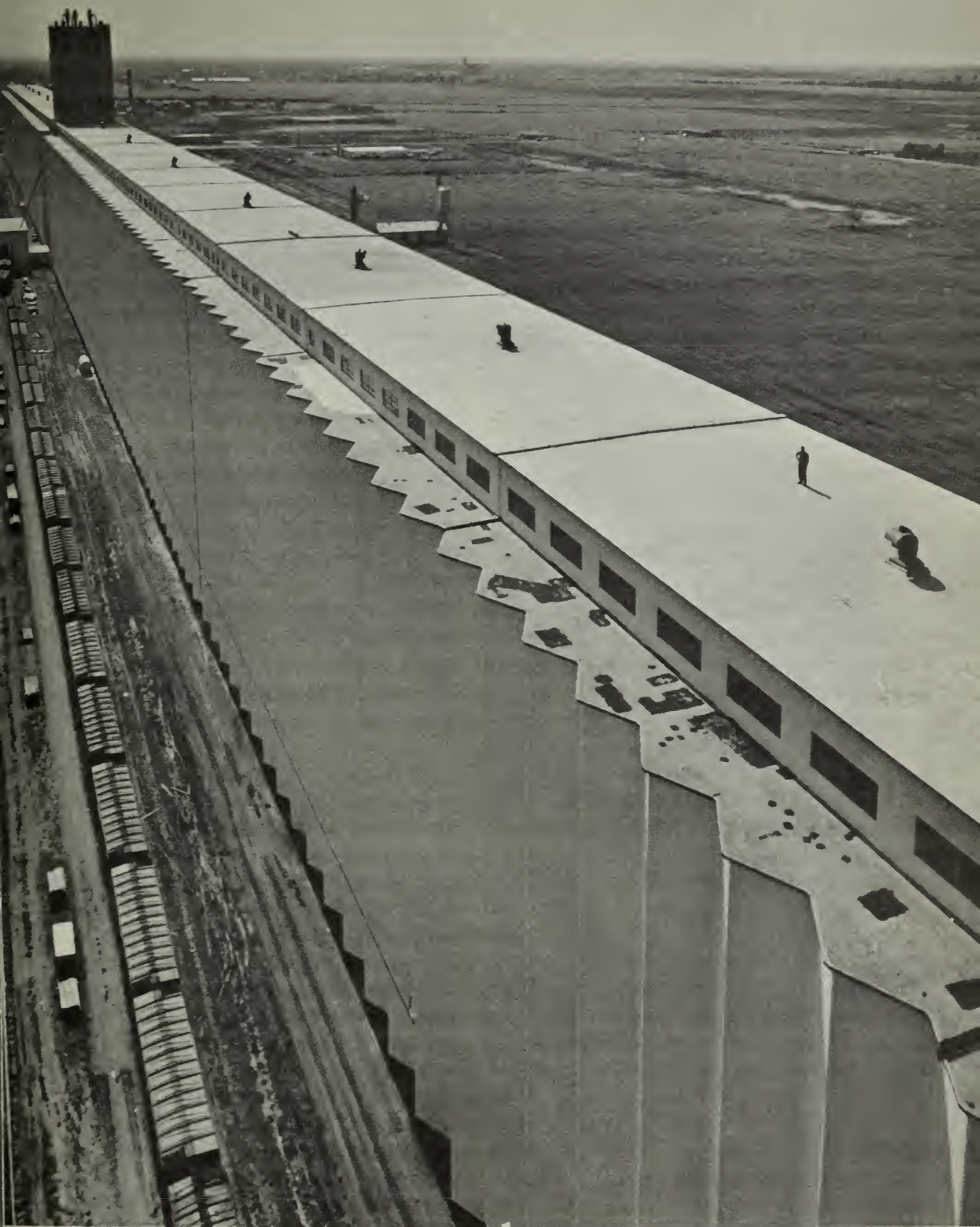
There are five regional federated soybean processing cooperatives and four other large soybean processing plants—three of the latter owned and operated by regional grain cooperatives and one by a farm supply regional. Four other small soybean processing plants are

Table 9.—Grain cooperatives: Estimated number of associations, membership, and value of sales, 1950-62 ¹

Period	Associations	Memberships	Value of sales ²	
			Gross	Net
	<i>Number</i>	<i>Number</i>	<i>1,000 dollars</i>	<i>1,000 dollars</i>
1950-51	2, 198	848, 620	2, 269, 752	1, 673, 655
1951-52	2, 193	906, 880	2, 678, 174	1, 816, 809
1952-53	2, 172	906, 060	2, 696, 769	1, 839, 558
1953-54	2, 160	934, 790	2, 502, 245	1, 743, 709
1954-55	2, 125	944, 010	2, 655, 355	1, 820, 771
1955-56	2, 117	952, 120	2, 691, 670	1, 827, 456
1956-57	2, 119	971, 180	2, 848, 228	1, 916, 997
1957-58	2, 107	987, 065	2, 913, 762	1, 954, 267
1958-59	2, 093	1, 021, 630	3, 210, 163	2, 215, 582
1959-60	2, 015	1, 036, 470	3, 299, 150	2, 262, 177
1960-61	2, 002	1, 049, 635	3, 541, 846	2, 431, 750
1961-62	1, 970	1, 046, 580	3, 627, 503	2, 481, 394

¹ Includes value of grain, other farm products marketed, farm supplies, and services performed for patrons.

² Gross includes intercooperative business; net excludes intercooperative business.



To give farmers a voice in the market place, it takes modern terminal elevators such as this one of the Farmers Cooperative Commission Company, Hutchinson, Kans., backed up by the owners, local cooperatives. Stretching out just a few feet short of half a mile, this terminal has a 17-million bushel capacity.

operated by local cooperative elevators.

In 1961-62, grain regionals and local shipping point associations had gross grain sales of \$3 billion, or 90 percent of all cooperative grain sales. The remaining 10 percent of total cooperative grain sales that year were made by 680 associations. These were principally farm supply cooperatives—operating primarily at local shipping point locations, whose grain sales

amounted to less than half their total sales.

During the 1961-62 crop year, Illinois led all other States in the value of grain, soybeans, and soybean products marketed for farmers directly by their cooperatives. The next three States in the order of grain marketing volume were Kansas, Iowa, and North Dakota. Each of these States had cooperative net grain sales of nearly \$200 million.

Organized Locals

THE economic environment influencing farmers' needs for cooperative grain marketing associations and the value gained from operating experience have played the most prominent role in the history and development of local grain associations. Marketing problems, mostly manmade, stimulated growers into making their first attempts to market grain cooperatively.

Early in its statehood, Wisconsin produced a surplus of wheat, and the first farmers' elevator in this country was built at Madison in 1857. Farmers probably built elevators in other sections about this time, but no records are available to show that they did. It is reported that improper management combined with destruction of facilities by fire ended the operation of this elevator.

Following the Wisconsin effort three farmers' elevators were built in Iowa—one each in 1867, 1869, and 1871. About this time the idea spread into other grain States, and a number of farmers' elevators were built. News items of the

period report: "The Patrons of Husbandry . . . the Grange . . . of Illinois owned or leased 80 elevators in 1874."

In the early 1870's, Grange associations organized a number of farmers' elevators and mills in Minnesota. Apparently the mills were profitable at first because the prices paid to their members were comparatively good. Yet the elevators were not entirely satisfactory. All these Grange facilities eventually were closed or sold to commercial interests; the last apparently was discontinued in 1878.

From 1876 to 1885, the number of cooperative elevators in operation declined rapidly. Early failures and a temporarily improved general price level from 1879 to 1883 slackened interest in this form of cooperation. From 1883 to 1886, there was no farmers' elevator in Iowa. No authentic information exists of the survival of any farmers' elevator organized before 1884.

Despite their short lives the earliest farmers' elevators apparently served a useful purpose. Farmers

gained experience from them. They also learned something of the increased power and benefits of united effort, and to this they turned again in the middle 1880's.

This new development got under way about 1886. It continued to expand almost unchecked until farmers were represented at practically every shipping point throughout the Grain Belt. Such representation resulted from the ownership of elevators or from the influence of such ownership at nearby stations.

The great expansion came in the period from 1900 to 1920 and reached its peak in 1919 and 1920. An estimated 4,000 of these organizations were operating in 1920. Farmers formed fewer new organizations each year after 1920 because they were already well represented in the principal grain shipping areas. Farm trucks came into use. Such improved transport made longer farm-to-market hauls practical and decreased the need for an elevator at every small shipping point.

Many recorded instances of grain cooperatives going out of business should not be counted as complete failures. These failures did not result in much, or in most instances, any real loss to stockholders and patrons. Instead these associations had successfully served an economic purpose during a period of need. They gave way because changed conditions made it possible for their members and patrons to be served more conveniently by other cooperatives at nearby locations and because of various kinds of management inadequacies.

The principal reasons cooperatives in this group went out of business were:

1. *Many were never adequately financed.* This often meant a lack of initial member capital, paying out all earnings, and borrowing from commission firms that required all grain to be shipped to them.

2. *Directors were not always well chosen.* Successful direction calls for men of real business ability who have the confidence and support of both members and potential members.

3. *Directors failed to employ qualified managers.* Too often managers lacked knowledge of how to handle grain, were not good merchandisers, and were unfamiliar with the cooperative way of doing business.

4. *Many lacked efficient accounting.* Poorly kept records resulted in inadequate financial statements on which erroneous decisions were made. Delayed audits often revealed that the cooperative was bankrupt or on the verge of bankruptcy.

One of the oldest grain cooperatives still operating—the Rockwell (Iowa) Farmers Co-op Society, organized in 1889.



5. *Members, and sometimes directors and employees, failed to understand that the association existed solely to serve its farmer-owners and patrons.* When the

cooperative became just another elevator at which grain could be sold, and members lost sight of cooperative principles, the chances of business failure were increased.

Formed State Associations

GRAIN cooperatives in many States eventually formed statewide associations. Some of these in turn formed two national organizations.

However, in the three decades following the first attempts at cooperative grain marketing—about 1860—grower efforts were directed

toward local marketing associations but with little operating success.

Apparently no central or overhead organization was considered before 1889. In that year, five local farmers' elevators in one county in Iowa formed an association among themselves. It proved unsuccessful, but the movement for overhead organizations assumed definite shape about 14 years later.

The Nebraska Farmers' Grain Dealers Association was organized in 1903; the Illinois Farmers' Grain Dealers Association, in 1903; and the Farmers' Grain Dealers Association of Iowa, Des Moines, in 1904. During the period 1903–19, such organizations were set up in practically all the Grain Belt States.

These first overhead organizations did not market grain. However, they helped greatly to stimulate cooperative endeavor. State associations helped new companies to organize and old ones to reorganize.

They helped secure elevator sites and sidetracks and took up questions of insurance, grain losses

Grain cooperatives in many areas eventually formed statewide associations. This 1945 scene shows trucks waiting to unload at a State local elevator at Bismarck, N. Dak.



caused by leaky cars, shippers' rights in terminal marketing, accounting and auditing, and various other problems.

Generally, such overhead organizations have had a stabilizing influence among local farmers' elevators.

States Formed Nationals

JUST as locals found it desirable to form State associations, these in turn formed two national associations.

Farmers National Grain Dealers Association

Plans were made to form a national association of the State associations at a meeting of State association secretaries from Illinois, Minnesota, South Dakota, and North Dakota at Minneapolis, Minn., on May 17, 1912. At that time only these six States had statewide associations. Following this meeting, these State associations organized the National Council of Farmers' Cooperative Associations in Minneapolis on June 18, 1912.

The National Council functioned until March 1920. Then at the annual meeting in Chicago, its name was changed to Farmers National Grain Dealers Association. Headquarters remained at Minneapolis.

During that time, and later, the Farmers Grain Dealers Associations of Indiana, Kansas, Missouri, Colorado, Ohio, and Oklahoma were included in the membership. Later the Colorado association combined with the Farmers Grain Dealers Association of Nebraska, and the Missouri association went out of existence.

Within a few years, differences in viewpoints developed over co-

operative terminal grain marketing. The State associations of Nebraska, Kansas, Oklahoma, and Iowa, which were most friendly to the activities of the Farmers National Grain Corp., Washington, D.C.—the national cooperative grain sales agency—withdrawed their memberships.

Membership in the Farmers National Grain Dealers Association then comprised the following State associations: Farmers Grain Dealers Association of Illinois, Bloomington; Farmers Grain Dealers Association of North Dakota, Fargo; Farmers Elevator Association of South Dakota, Aberdeen; Farmers Elevators Association of Minnesota, Minneapolis; Farmers Grain Dealers Association of Ohio, Fostoria; and Farmers Grain Dealers Association of Indiana, Lafayette.

National Cooperative Elevator Association

In October 1933, the National Cooperative Elevator Association, with headquarters in Omaha, Nebr., was organized. Its charter members included the Nebraska Cooperative Association, Omaha; the Kansas Farmers Cooperative Association, Hutchinson; Farmers Cooperative Grain Dealers Association of Oklahoma, Enid; and Farmers Grain Dealers Association of Iowa, Fort Dodge.

Objectives of the two national associations were much the same. They sought to encourage development of cooperative grain marketing locally and in the terminal

markets. Both tried to support cooperative principles and to improve market practices to give the grain grower the largest possible return for his products.

Entered Terminal Markets

EXPERIENCE indicated that the presence of a farmers' elevator at a country shipping point was instrumental in improving practices on that market and that the local association helped to insure the farmer correct weights and grades. The competitive element helped reduce buying and handling costs.

Although local associations could assist in improving the price structure and trading practices at the local markets, they could not individually affect trading practices, prices, and other conditions on the terminal markets. Therefore, farmers needed to find ways to extend the cooperative influence into the terminal market.

First Phase—Regional Grain Cooperatives

The cooperative influence in the terminal markets in the form of grain marketing cooperatives began about 1910, but the real expansion started during the first World War and reached a high point in number of organizations in 1932. Two principal types of terminal marketing or regional grain cooperatives were formed during this period—wheat pool associations and terminal sales agencies.

Wheat Pools

The wheat pool movement was based on the principles of orderly

marketing. Producers holding memberships in the organization agreed to market all their grain through their local elevator. The local elevators in turn combined to make up the pool at the terminal market.

The pool received the grain and advanced to the grower an agreed proportion of the market price at the time of delivery. The organization then attempted to sell an equal amount of all grain delivered in each month during the crop year. The pool operated on a non-profit basis, returning to its members the entire proceeds above operating costs.

Leaders of the wheat pool movement believed that regulating the sale of the grain would stabilize the market price. In no year, however, did the wheat pool handle enough grain to exert the influence intended.

The wheat pool movement reached its height during 1924–25. The 10 terminal market pools then operating reported almost 28 million bushels of grain handled during the season. During the 10 years of their operation, 1921–30, wheat pools handled more than 187 million bushels of grain for their farmer members.

The wheat pool movement came to an end in the United States in 1930. At that time the pools then in operation became affiliated with the Farmers National Grain Cor-

poration, Washington, D.C., organized as a national cooperative sales agency operating at most of the terminal grain markets in the United States.

Several factors contributed to the difficulties of operating the wheat pools. One of those was the difficulty of satisfying the member on the price received for his grain.

Presently, as in the past, a large proportion of the grain moves out of the hands of producers a few months after harvest. On an advancing market the grower takes a lower price when he sells immediately than if his grain is held for him by the marketing organization, if storage charges, interest, and other expenses do not amount to or exceed the rise in price. On a declining market, it is to the advantage of the producer to sell as quickly as possible.

Declines in grain prices after 1928 were a decided handicap to the pool movement. Freedom of the producer to select the time for selling his grain seemed more desirable to many farmers than the idea of orderly marketing.

Another condition causing dissatisfaction among growers with wheat pools was the fact that they received only about two-thirds of the market price of their wheat at the time of delivery. Although additional payments were made from time to time, final payment usually was not received until the end of the season.

In addition, pool members were scattered over a large area, and it was difficult for the association to keep them advised of operations.

Terminal Sales Agencies

As farmers' elevators increased in number, they had difficulty in selling through established agen-

cies. The elevators found that they needed representation on the terminal markets.

Agitation for cooperative grain sales agencies began in the Minneapolis-St. Paul market area and the Pacific Northwest in 1908. It was followed by formal organization of the Equity Cooperative Exchange, St. Paul, Minn., in 1911.

By 1920, the Exchange owned a modern 500,000-bushel terminal elevator. It became the terminal sales agency for many farmers' elevators located in North Dakota, South Dakota, and Minnesota. At one time this association represented nearly 100 local elevators. A decline in farmer interest contributed to the failure of the Exchange.

In 1911, the Pacific Northwest Tri-State Terminal Company, Seattle, Wash., was incorporated on a capital-stock basis as a selling agency to furnish terminal marketing service for grain. It acquired a controlling interest in a score of local associations whose grain was to be marketed through it.

With the formation of the Washington Wheat Growers Association in 1920, the terminal company lost much of its volume. It ceased operation in 1921.

In 1914, what is now the Farmers Cooperative Commission Company, Hutchinson, Kans., was started as the Equity Commission Company by 20 farmer elevator associations. In 1963, it maintained offices and operated terminal elevators at both Hutchinson and Wichita, Kans., with a capacity of 32 million bushels.

The Farmers Union Jobbing Association, Kansas City, Mo., was organized in 1914 as a farm supply association for its member elevator

associations. In 1918, this association began handling grain on a commission basis.

By 1963, it was operating as a regional grain cooperative with terminal elevators at Kansas City and Topeka, Kans. It acquired a soybean plant at St. Joseph, Mo. The association's name has now been changed to Farmers Union Cooperative Marketing Association.

A recent development in regional grain marketing cooperatives has been an accelerated movement of grain by water—and at substantial savings to producers. Kansas City Terminal Elevator with its 4 million bushels capacity is helping Missouri Farmers Association, Columbia, Mo. and Equity Union Grain Co., Lincoln, Nebr., to move grain more cheaply.

In 1916, the Equity Union Grain Company, first known as the Equity Union Exchange, organized at Kansas City, Mo. and operated solely as a commission firm for many years. Headquarters are now at Lincoln, Nebr., where the association operates a large terminal elevator.

It also has a river house at Rock Point, Nebr., and jointly with the Missouri Farmers Association, Columbia, it owns and operates a 4 million bushel water terminal at Kansas City.

The Montana Grain Growers of Great Falls, Mont., was organized in 1918. This association operated for only 3 years, going out of business in 1921.

Following 1920, the regional cooperative marketing agencies for grain developed rather rapidly. By this time, there were enough local grain cooperatives to center attention upon the development of cooperative terminal sales agencies.

The number of sales agencies active in the various markets increased from 5 during the 1919–20 season to 26 during the 1937–38 season, the year of dissolution of the national sales agency. The peak number, 29, was reached in the 1932–33 season.

Second Phase—Farmers National Grain Corporation

The years during and after World War I, as already stated, saw the development of terminal cooperative sales agencies. These selling agencies usually began to operate on a specific terminal market with member elevators in the normal market region—thus the term regional grain cooperatives.

The Farmers National Grain Corporation was established on Oc-



tober 29, 1929, by the terminal or regional marketing associations. Leaders in the cooperative grain marketing movement believed such an agency would serve many constructive purposes. It was expected to do much to coordinate the activities of the regional or terminal marketing associations, minimize speculation, and enable growers to exert more influence on terminal market prices and practices.

Volume Handled.—When the Farmers National Grain Corporation was created, there were some 3,600 local farmer elevator cooperatives. In 1928–29, these handled about 500 million bushels of grain. In this season, 7 wheat pools handled about 15 million bushels, and 12 terminal sales agencies handled some 52 million bushels.

These data show that the volume of business handled by local cooperatives was large. Of this quantity, however, only 67 million bushels was handled cooperatively on terminal markets by wheat pools and other regional sales agencies. Thus, the need of cooperatives at that time seemed not so much an increase in total volume of business

as greater coordination among the farmer organizations.

Individual farmers' elevators put their wheat on terminal markets in competition with one another. Both pools and sales agencies often solicited the business of the same farmers. Therefore, much of the energy of the movement was wasted in competition among cooperative organizations of different types.

Farmers National Grain Corporation Volume.—In December 1935, a total of 23 cooperative terminal grain marketing associations, commonly known as regionals, were stockholders in the Farmers National Grain Corporation—the national sales agency. Nearly all of these had turned over their marketing functions to that organization.

In 1935, the National controlled a total terminal elevator capacity of about 40 million bushels, nearly 18 million bushels of which represented owned facilities, and about 22 million bushels, leased facilities. However, this move toward centralized marketing did not hold the support of enough local associations.

The Last Quarter Century of Growth

WITH the dissolution of the Farmers National in 1938, most of the former members reorganized, acquired the owned facilities, and began operating as regional or terminal sales agencies. Their primary function was to provide needed grain marketing services at terminal and subterminal market locations for cooperative elevators operating at local shipping points.

The regionals, then and now, operate almost exclusively as federated cooperatives; that is, their members, owners, and patrons are the local farmer cooperative elevators. The locals, on the other hand, are set up and operate as centralized organizations with direct producer ownership and patronage.

Many significant changes have

taken place in cooperative grain marketing since the individual regionals came back into the picture in 1938, and particularly since the end of the Korean War. Many of these have resulted from changes in farming practices.

Grain production has increased significantly since 1938. In that year, production of the eight major grains and oilseeds (corn, wheat, oats, barley, sorghum, rye, flax, and soybeans) was nearly 4.8 billion bushels. Production increased to 5.9 billion bushels in 1953 and to 7.5 billion bushels in 1961—an increase of 56 percent over 1938 production.

Of even more significance was the increase in off-farm sales of these commodities. In 1938, a little less than 1.7 billion bushels were sold, or 35 percent of total production. Sales in 1953 were not quite 3 billion bushels, or 50.3 percent of production. In 1961, a total of 4.3 billion bushels or 56.8 percent of the production was sold.

Thus, while production between 1938 and 1961 increased by 56 percent, off-farm sales increased by 153 percent. Between 1953 and 1961, off-farm sales increased by 43 percent.

This increased volume of grain leaving the farm exerted pressure on local cooperative elevators which, in turn, called for change at the regional level. In addition, a number of other developments—some of them at the farm level—called for changes in the marketing and distribution setup.

One of these developments has been the buildup in carryover stocks. Off-farm stocks of these eight commodities amounted to 234 million bushels in 1939. This figure increased to 1.1 billion bush-

els in 1953 and to more than 3 billion bushels in 1961.

Improved farm machinery, transportation equipment, and roads have enabled the producer to shorten the harvest period a great deal. More and more producers prefer to sell or store at harvest in commercial facilities. Many producers are harvesting grain at higher moisture content, since there is less field loss. This calls for drying and aeration equipment.

At the insistence of patrons, thousands of elevators are handling farm production supplies, with many of them manufacturing and distributing feed, fertilizer, and other supplies.

Grain handling cooperatives, both local and regional, have grown and changed to meet the needs of their members as these needs arose. This expansion has given the farmer a voice in the marketplace at the local shipping point, at terminal markets, and even in international trade through his own cooperative organizations.

Growth of Locals

Many of the local grain cooperatives operate branch elevators, most of them only 1 or 2 branches but some of them up to 8 or 10. It is estimated that the more than 2,600 local associations are operating at 3,500 different locations.

In line with the changed producer practices in marketing and the accumulation from carryover of grain stocks, storage capacities have been greatly increased in major grain producing areas. It is estimated that local grain handling cooperatives have some 1 billion bushels of storage capacity. Some larger ones operate with as much as

8 million bushels of storage.

The vast majority of these associations also handle various kinds of farm supplies. Many of them have constructed feed mills, distribute feed in bulk, and operate grain banks. They also are in petroleum distribution and, more recently, some have been constructing fertilizer blending plants.

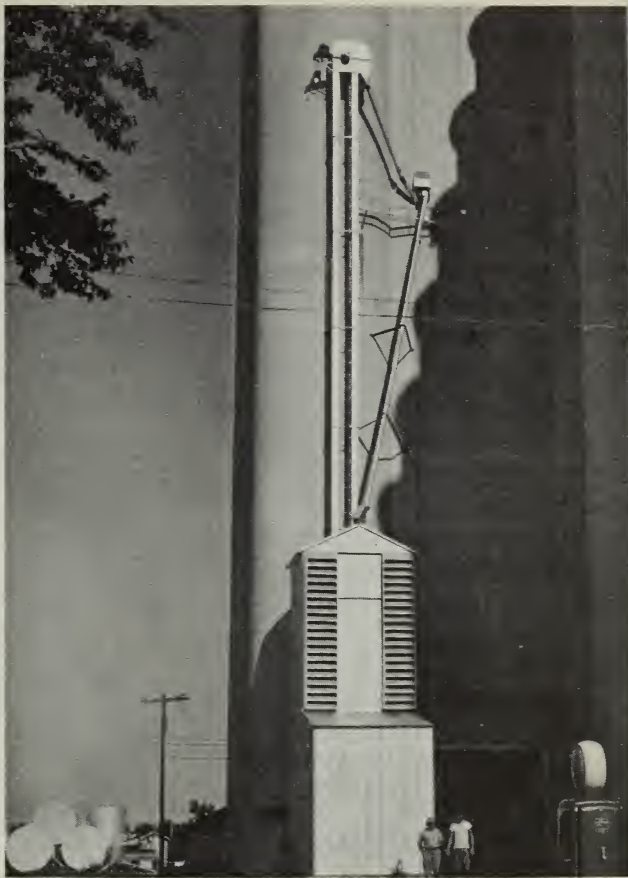
The use of fieldmen to work directly with members on their crop and livestock production problems has also been on the increase.

As the locals have grown to meet the needs of the producers, so have the grain regionals grown to meet the needs of the locals.

Growth of Regionals

As indicated earlier, 19 regionals resumed or began operations after the dissolution of the Farmers National Grain Corporation in 1938. At that time, their principal function was to serve as a grain broker or commission selling service. Nine of the 18 regionals operated terminal or subterminal elevators with a capacity of 19½ million bushels, most of which was leased.

This situation has greatly changed. Now most grain is purchased "to arrive" or "on track" and merchandised through cooperatively owned facilities. The number of regionals has grown to 29 and still includes 16 of the original 18. They are operating more than 325 million bushels of storage capacity at 132 market locations (fig. 7). Of these elevators 40 are located on water to take advantage of lower transportation costs and broaden market potentials. Several of them have purchased barges to move their members' grain efficiently and economically to mar-



Harvesting grain at a faster pace and at higher moistures requires bigger and better equipped elevators such as this one with the grain dryer in the foreground.

kets, and in 1963 shipped more than 100 million bushels in this manner. Two of them recently announced the purchase or lease of rail equipment.

The volume handled by regionals has increased rapidly. In 1961-62 they handled more than 700 million bushels, or 16 percent of the total farm sales from the 1961 crop. In the 3 years beginning with 1938-39, they handled around 100 million bushels, or 6.5 percent of the total; even in 1953-54, they handled a little less than 10 percent of the total.

During 1961-62, these regional organizations handled more than 51 percent of the flax, 28 percent of the wheat that left the farm, nearly 17 percent of the soybeans, and a little more than 6 percent of the sorghum.

As would be expected from the growth in volume and facilities, the balance sheet for these regionals has changed greatly since 1938-39. Total assets then amounted to \$6.6 million compared to \$321 million at the end of 1961-62. Fixed asset book value grew from less than \$1 million to more than \$126 million. Member capital in these cooperatives in 1939 was \$3.2 million. At the end of 1962, it had increased to more than \$164 million.

As a group, these cooperatives have had net margins every year. In the early years, margins were around 1 cent a bushel, while more recently, they have averaged around 4 cents a bushel. For the entire period, they have averaged over 3 cents a bushel.

In addition to operating these facilities and merchandising grain for their members, these regionals have made other significant contributions to our grain marketing system.

Farmers Cooperative Commission Co., Hutchinson, Kans., was the first in the elevator industry to install a complete milling and baking laboratory so that it could accurately determine the baking quality of its elevator stocks and thus supply grain to meet much more exact mill specifications.

Following this installation in 1954, some seven or eight of the regionals now operate similar facilities. They have increased the volume of merchandised grain and stimulated production of approved

varieties of high-quality grain. Farmers Cooperative Commission Co. has also recently constructed and is operating a bulgur processing plant in an effort to increase the market potential and returns for its members.

The largest of the regionals, Farmers Union Grain Terminal Association (G.T.A.), St. Paul, Minn., has recently undertaken other lines of activity. It has built and is operating feed plants and has acquired Honeymead Products, Mankato, Minn., a large soybean processing plant, and Minnesota Linseed Company, a large flax processing plant.

The Missouri Farmers Association, Columbia, also is in the mixed feed business and it operates a soybean processing plant. The newest of the regionals is the Arkansas Grain Corporation, Stuttgart, organized in 1958 to construct facilities and market the increased volume of soybeans being produced. It operates a large processing plant at Stuttgart and has another plant at Helena, Ark.

Arkansas Grain Corporation is the only regional, and one of the very few grain cooperatives in the country, operating on a seasonal pool basis. This association also operates seasonal pools on wheat, barley, and oats for those members producing and marketing all these crops.

Regional Mergers

To improve the bargaining position of farmers, provide improved and additional services, and operate more efficiently, some regional grain cooperatives have merged since the Korean War. The first of these was the merger of Indiana Farm Bureau Cooperative Association and Indiana Grain Coopera-

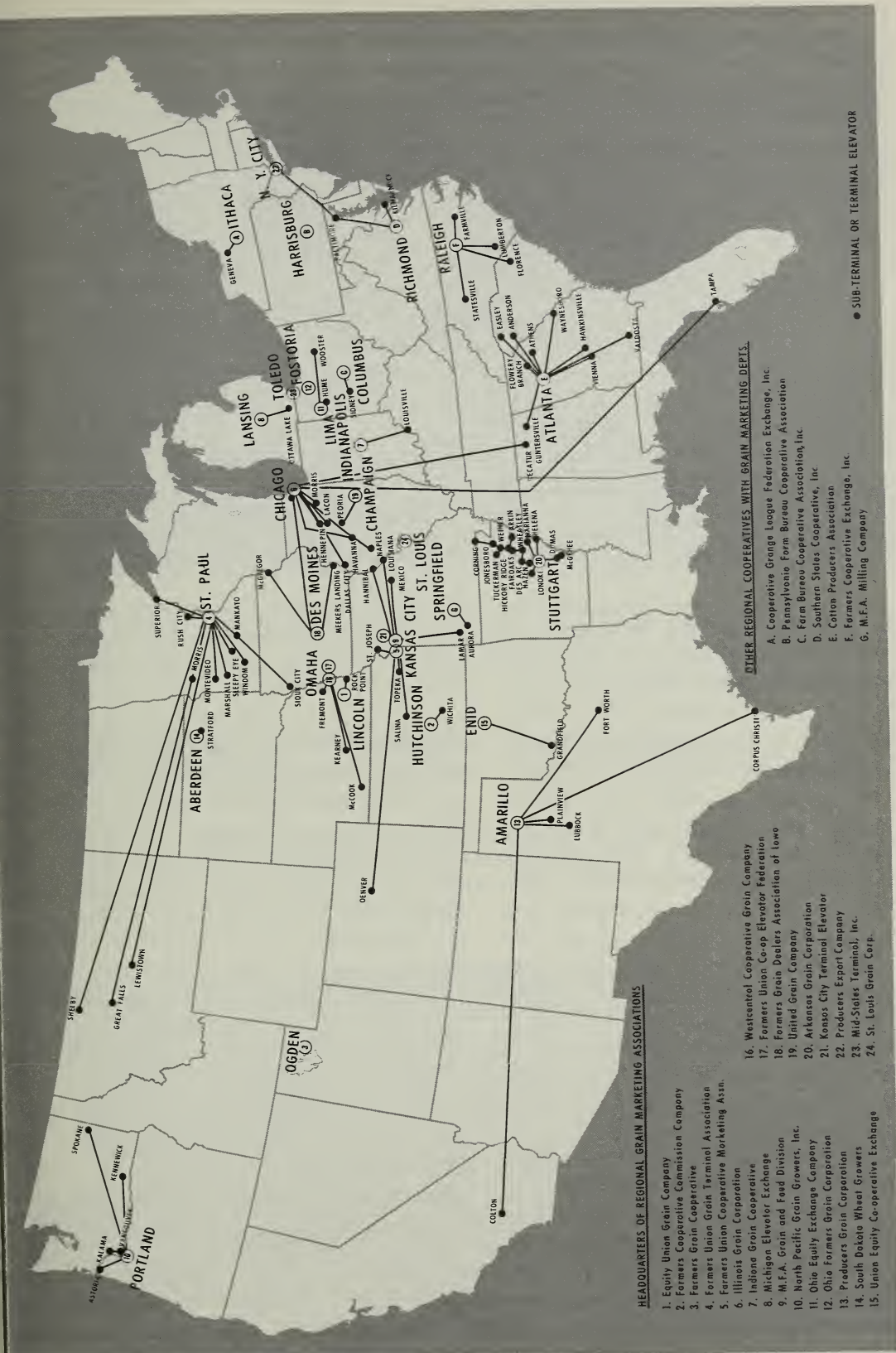
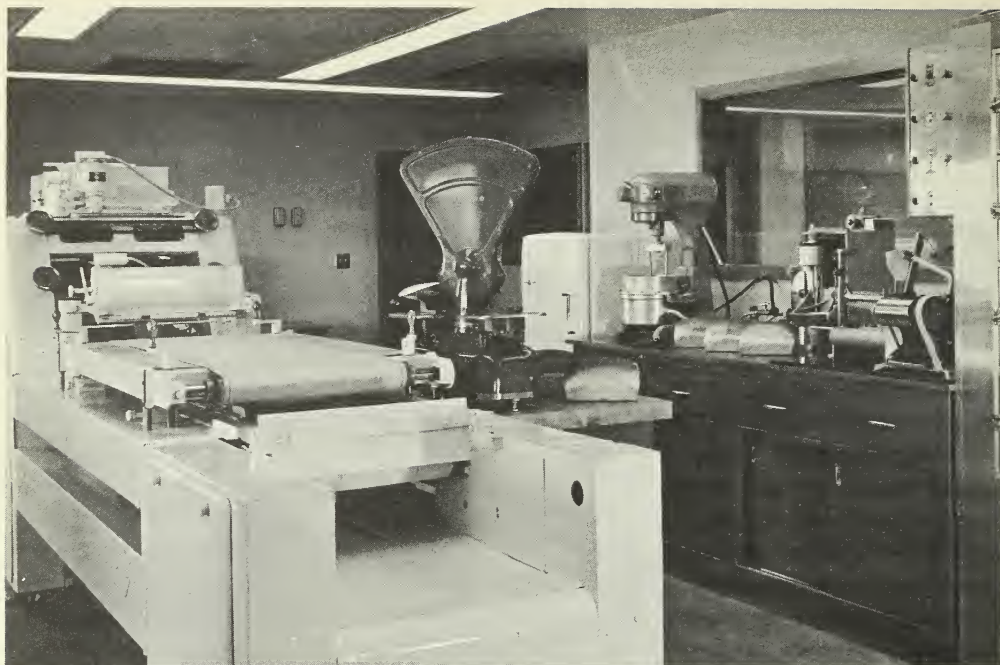


Figure 7.—Location of regional grain marketing services and their subterminal and terminal elevators, 1964.



This milling and baking laboratory of Union Equity Cooperative Exchange, Enid, Okla., enables it to give customers the kind of wheat they want, thus increasing their members' market potentials. Several other regionals have similar laboratories.

tive, both of Indianapolis. The latter operates as a division of IFBCA.

A short time later, the Illinois Grain Terminals, which owned a number of elevators, merged with Illinois Grain Corporation, Chicago, which had been operating as a commission firm. At about the same time the Missouri Farmers Association, Columbia, and Producers Grain Commission Company, St. Louis, consolidated.

In the fall of 1962, the Michigan Elevator Exchange, marketing grain and dry beans, joined with Michigan Farm Bureau Services, a regional farm supply cooperative. This new cooperative recently acquired the facilities of Williams Grain Corporation, including some flour milling facilities. Headquarters are in Lansing.

Effective January 1, 1964, the

Farmers Union Cooperative Marketing Association, Kansas City and Farmers Union Terminal Elevator, Denver, merged. Farmers Union Cooperative Elevator Federation, Omaha, joined them later. Headquarters are in Kansas City. On September 1, 1964, United Grain Company, Champaign, Ill., merged with Illinois Grain Corporation, Chicago, Ill., bringing together into one organization some 300 local cooperative elevators.

Merger possibilities are being discussed by three other regional grain cooperatives.

Enter Export Markets

By 1958, grain producers were pretty well represented domestically at local and terminal markets through operation of their cooperatively owned facilities. Because

they were handling ever-increasing quantities of grain and were aware of the need for increasing exports and seeking new outlets, the regional cooperatives—with the backing of their member cooperatives and in turn their member producers—decided to enter the export business.

This step was taken only after long careful study and the experience of some of the regionals in exporting primarily through brokers. In September 1958, Producers Export Company, New York City, was incorporated with 19 of the regional grain cooperatives as charter members.

Since that time, three others have become members. With agents in foreign countries, they have exported millions of bushels of grain and oilseeds to some 30 countries around the world and have never had a complaint on quality of grain shipped.

Shortly after Producers Export began operation, the five regionals

in Ohio, Indiana, and Michigan organized Mid-States Terminals and began operations at Toledo on the St. Lawrence Seaway. They sell for export as well as domestically. They purchased a small port house that has been enlarged and modernized. In their first year of operation, Mid-States Terminals handled 7 percent of the Toledo volume. This had increased to more than 20 percent by 1962. Mid-States and all of its members are also members of Producers Export Company.

During the summer of 1963, St. Louis Grain Corporation was organized by Illinois Grain Corporation, Chicago; Farmers Union Grain Terminal Association, St. Paul, Minn.; and Missouri Farmers Association, Columbia. They have acquired terminal elevator facilities on water at St. Louis. This is benefiting many regional cooperatives with facilities on the rivers of the Midwest.

Cooperatives had limited export

Grain producers through their cooperative organizations now own or lease several port elevators for ready access to world markets. This 19-million bushel elevator of Farmers Union Grain Terminal Association is located at Superior, Wis.



facilities at the time Producers Export was organized. Believing their effectiveness would be enhanced by such facilities, the cooperatives, jointly and individually, have worked to get them. The result is that currently cooperative producers have access to port facilities at Baltimore, Toledo, Chicago, Superior, Wis., Kalama, Wash., and Saginaw, Mich. In early 1964, Producers Grain Corporation, Amarillo, Tex., acquired the Corpus Christi, Tex., elevator. It is a mod-

ern port facility with capacity of 4.5 million bushels.

Union Equity Cooperative Exchange, Enid, Okla., was planning the construction of a modern export elevator at Houston, Tex., for completion in 1966.

Thus, a cooperative grain producer can market his grain—locally, nationally, even to the ends of the earth—through his own integrated cooperative organizations and facilities.

Cooperative Processing of Soybeans

GRAIN cooperatives, both local and regional, handle and market soybeans just as any other grain for the most part. Thirteen cooperatives process soybeans and market the resulting meal and oil in their various forms. Cooperative processing plants are in Iowa, Minnesota, Missouri, Kansas, and Arkansas. One of the cooperative cottonseed processors in Texas and another in Mississippi also process some soybeans.

There have been plants in Pennsylvania, Ohio, Illinois, Kentucky, and Indiana, but they have all ceased operations.

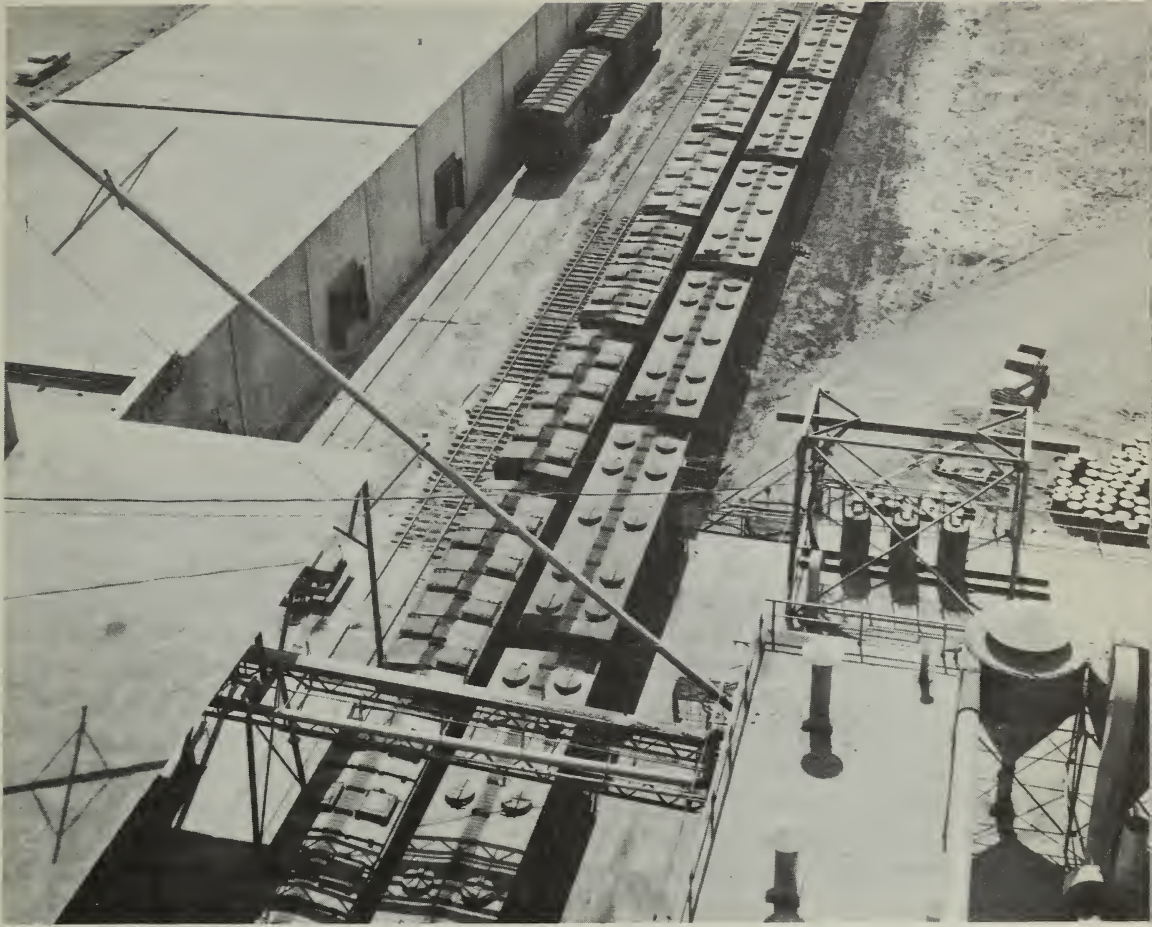
Four of the 13 cooperatives are of the federated type; that is, owned and operated by local cooperative elevators. Four are operated as subsidiaries of regional cooperatives. Four are operated as a department of a local cooperative elevator with direct farmer membership. One is a large centralized regional with direct farmer membership. These farmers also operate local cooperative elevators that supply soybeans to the regional for processing and product marketing.

The first soybean processing co-

operative was organized in Kentucky in 1940 in an attempt to increase the farmer's price for beans. Several others were established around 1943, primarily to insure the soybean producer a supply of soybean meal. Many of these went out of business in the 1950's.

From the late 1940's until 1960, the volume crushed by cooperatives increased considerably but at about the same rate as the whole industry; that is, 3.5 to 4 percent annually. The crush more than doubled in this period. There was a significant increase in cooperative volume in 1960-61 with the acquisition of Honeymead Products by Farmers Union Grain Terminal Association and the operation of the new plant by Arkansas Grain Corporation, Stuttgart.

Currently, cooperatives are processing around 10 percent of the beans crushed. This will increase since Missouri Farmers Association, Columbia, has built a new plant at Mexico, Mo. Arkansas Grain completed construction of its second plant at Helena in the spring of 1964, and Farmers



Covered hopper cars lined up for unloading rice or soybeans at the Stuttgart facilities of Arkansas Grain Corporation and Arkansas Rice Growers Cooperative Association.

Union Cooperative Marketing Association (CMA), Kansas City, Mo., acquired a crushing plant at St. Joseph, Mo., in the fall of 1963.

Several cooperatives that were organized early have converted from screw press to solvent extraction and greatly expanded their crushing capacity. Of the 13 associations, 7 operate solvent units only, 4 use only screw presses, and 2 operate both solvent and screw press plants. More than 90 percent of the cooperative capacity is in solvent units.

In an effort to increase market

potentials and returns to growers, some mills have installed equipment to further process the products. Six mills are now equipped to produce 50 percent protein meal, and one of these produces industrial soy flour and grits.

The two largest cooperatives have oil refining equipment and are producing finished oils. One of these has installed hydrogenation equipment and is producing hardened oil. Another has added equipment and degum oil and still another cooperative is considering such action.

The most significant recent development has been organization of a centralized selling or common marketing agency, Soy-Cot Sales.

Membership is made up of cooperative cottonseed and soybean proc-

essors from eight States in the major producing areas. The purpose of this cooperative is to market, on a volume basis, the products from members both domestically and in export.

Flax Handling and Processing

AS with soybeans, local and regional cooperative elevators handle flax as they do any other grain in the producing area. One unique situation is in the Imperial Valley of California, where nearly all the flax is marketed through a grower cooperative. It is the practice of this association to make contracts with growers several months before harvesting begins for the sale of flaxseed produced from specific acres.

There was no cooperative processing of flaxseed until very recently, when Farmers Union Grain Terminal Association (G.T.A.) acquired the facilities of Minnesota Linseed Oil Company, Minneapolis, Minn. This is one of the largest flax processing plants in the country. It is a needed outlet for the large quantities of flax handled by G.T.A. and its affiliated member elevators and for linseed meal used in its mixed feed operations.

National Federation of Grain Cooperatives

ON February 21, 1939, the regional grain cooperatives organized the National Federation of Grain Cooperatives. It has its executive offices in Washington, D.C. The Federation was organized to:

1. Advise its members on Federal and State legislation affecting them or their producer members.
2. Keep its members informed on legislative matters.
3. Aid its members in their dealings and relations with State and

Federal governments and departments thereof.

4. Inform its members on other matters of interest to them and their producer members.

The original membership consisted of seven large regional cooperative grain marketing associations. In 1963, the Federation's membership included 20 grain regionals, 4 regional farm supply cooperatives with grain marketing departments, 1 rice cooperative, and 1 dry bean and pea cooperative.

Livestock and Wool Cooperatives

by R. L. Fox
Chief, Livestock and Wool Branch

COOPERATIVE action among livestock producers dates back to colonial days. Sheep growers in New York State were among the first to market their products co-operatively.

Livestock Cooperatives Developed Early

AMONG the earliest cooperative activities recorded were societies for importing purebred cattle, beginning in 1785. Community drives of livestock from Virginia and the Carolinas to the coastal cities of Baltimore, Philadelphia, and New York started about 1794. Later cooperative developments took the form of public auction sales of purebred cattle in Ohio in 1836.

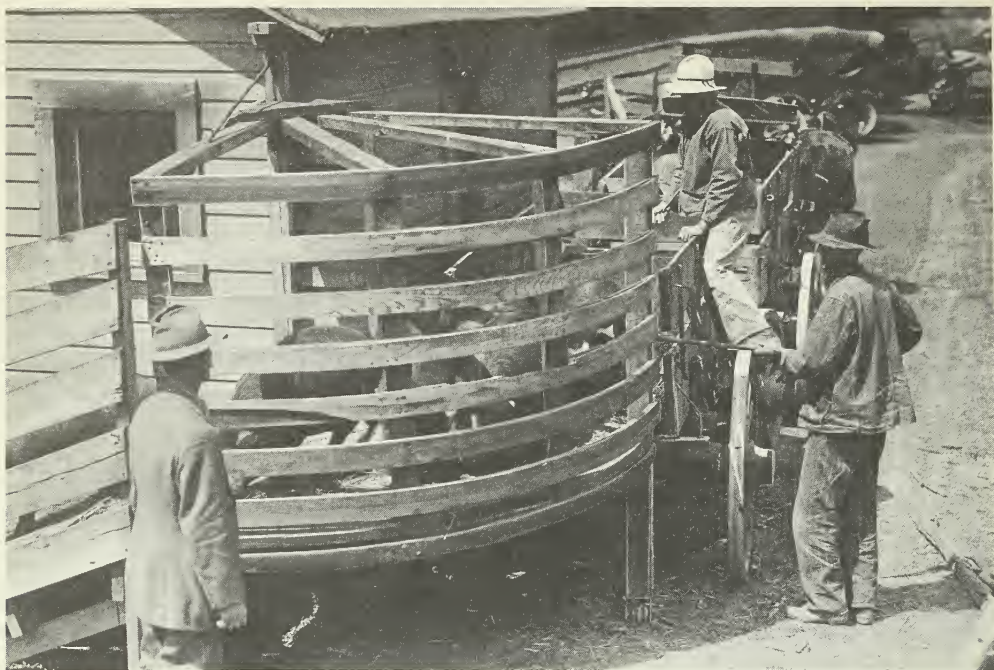
Over 785,000 farmers and ranchers sent their livestock to market through 530 cooperatives in fiscal year 1961-62. That same year, cooperatives that handled livestock and livestock products exceeded \$1.5 billion in volume of business and ranged third among all cooperative marketing groups (table 10).

The general trend in cooperative livestock marketing has been for fewer associations to handle a large-

Table 10.—Livestock cooperatives: Estimated number of associations, membership, and value of sales, by specified periods, 1931-62

Period	Associations	Memberships	Value of sales ¹
	<i>Number</i>	<i>Number</i>	<i>1,000 dollars</i>
1931-35 average	1,608	422,000	215,580
1936-40 average	937	600,000	290,800
1941-45 average	717	620,200	540,200
1946-50 average	588	893,600	1,052,600
1951-55 average	521	927,837	1,415,347
1955-56	491	894,775	1,179,421
1956-57	501	881,565	1,172,995
1957-58	490	880,225	1,299,024
1958-59	490	862,205	1,525,312
1959-60	467	837,665	1,468,382
1960-61	456	784,760	1,434,149
1961-62	453	785,080	1,512,571

¹ Net value (excludes intercooperative business) since 1951-52.



Cooperative shipping associations served farmers in the early 1900's. Here a farmer delivers hogs for shipment to a marketing agency at a central market.

er volume of livestock. This is due to improved transportation — especially trucks and highways—larger farms, more specialized livestock enterprises and many other factors.

Growers Organize Locals

The first local livestock shipping association, the Farmers Shipping Association, was organized at Superior, Nebr., in 1883. This association of Nebraska and Kansas farmers, formed to assemble and ship livestock by rail to central markets, operated continuously for over 50 years.

The shipping association movement spread into other midwestern States during the early 1900's, being successful in Minnesota, Wisconsin, and Iowa. By 1916, more than 600 were in operation.

The period from 1917 to 1923 was one of rapid expansion. By 1924, an estimated 5,000 locals were assembling and shipping livestock by rail from country points to terminal markets. The majority of these local shipping associations were located in the upper Midwestern Corn Belt States.

Function of Locals

The function of these local associations was to provide shipping service for a limited area around a rail loading point. The bulk of the patrons of the local shipping associations were small farmers, or less-than-carload shippers, with only a few head of livestock to sell at a time.

The shipping association enabled them to patronize markets they otherwise could not reach unless they pooled their livestock with

that of other farmers in the area.

The associations consigned practically all livestock shipped by patrons to commission sales agencies at terminal markets. These sales agencies fed, watered, sorted, and sold the livestock; prepared account sales; and remitted net proceeds to the local shipping association manager. The manager distributed checks and account sales to patrons.

County shipping associations, organized on either a federated or a centralized basis, followed closely in the wake of local livestock shipping associations. In the federated type, the local association assembled and shipped the livestock from local country points, and the federation's central office forwarded all returns and account sales back to the local. In many cases, the local manager prorated the proceeds and sent the checks to the individual patrons.

The centralized type, largely confined to Ohio, was the forerunner of the modern concentration yard. In this type, livestock from a relatively large area was concentrated for sorting and assembling into carloads. This concentration of volume made more frequent shipments possible.

Reasons Locals Declined

Since 1924, the number of local shipping associations has declined sharply. In 1964, approximately 450 locals were estimated to be in operation. Practically all of these functioned as assembling and trucking associations, with most of them located in Minnesota, Wisconsin, and North Dakota. Only a few associations continued to ship livestock by rail.

The principal reasons for the

decline of local livestock shipping associations were:

1. Extension of hard-surfaced, all-weather roads which make it possible for trucks to move livestock at any season direct from farm to market without the intermediary of the local association.

2. Growth of livestock auctions and small markets throughout the producing areas.

3. Decentralization of the packing industry with more processing plants near sources of supply.

4. Buying by packers and slaughterers at country points or direct from farmers.

Importance of Locals

The local shipping associations performed worthwhile services for livestock producers at a time when transportation to market was a difficult problem for the small farmer. They provided means for local assembling and shipping of livestock when no other facilities for the less-than-carload shipper were available. They were a major factor in reducing margins between local and terminal market prices.

They also were of educational value, since they familiarized producers with the differences in market values of various grades and weights of livestock.

Furthermore, the local livestock shipping associations taught farmers the benefits of working together in solving some of their common marketing problems.

They also formed a sound foundation for establishing farmer-owned cooperative sales agencies at terminal markets. In newly developed livestock producing areas, they still may serve as a starting point from which farmers can develop their own marketing organizations.

Establish Terminal Sales Agencies

The next important marketing step taken by farmers was establishing cooperative sales agencies at terminal markets where the bulk of livestock was sold. These agencies were established by producers and representatives of livestock and farm organizations.

The organizers believed that, through the operation of producer-owned and -controlled agencies, service to farmers and ranchers could be improved and marketing costs reduced. They believed they could develop agencies that would be competitive pacemakers on the markets where they operated in selling livestock, purchasing stocker and feeder animals, and rendering field service and other services to producers.

Livestock producers made the first organized attempt to establish their own selling agency in 1889 with the formation of the American Livestock Commission Company. They established sales offices at Chicago, Kansas City, St. Louis, and Omaha.

This cooperative operated successfully for 1 year but then was forced to close the Chicago branch because membership in the livestock exchange was refused. Without a membership it was impossible to operate. Subsequently, the other agencies closed.

A second attempt to establish a cooperative selling agency was made in 1906. Leading livestock organizations in the West and the Midwest were opposing a proposed general increase in commission rates on the terminal markets. Failing to halt the rise in rates, the livestock organizations established the Cooperative Livestock Com-

mission Company with sales offices at the Chicago, Kansas City, and South St. Joseph markets.

The cooperative handled a satisfactory volume within a few months after starting operations. At this point, dealers in stocker and feeder animals failed to provide adequate competition for these classes of livestock. Without satisfactory outlets, the cooperative could not operate, and closed its last office in Chicago in December 1909.

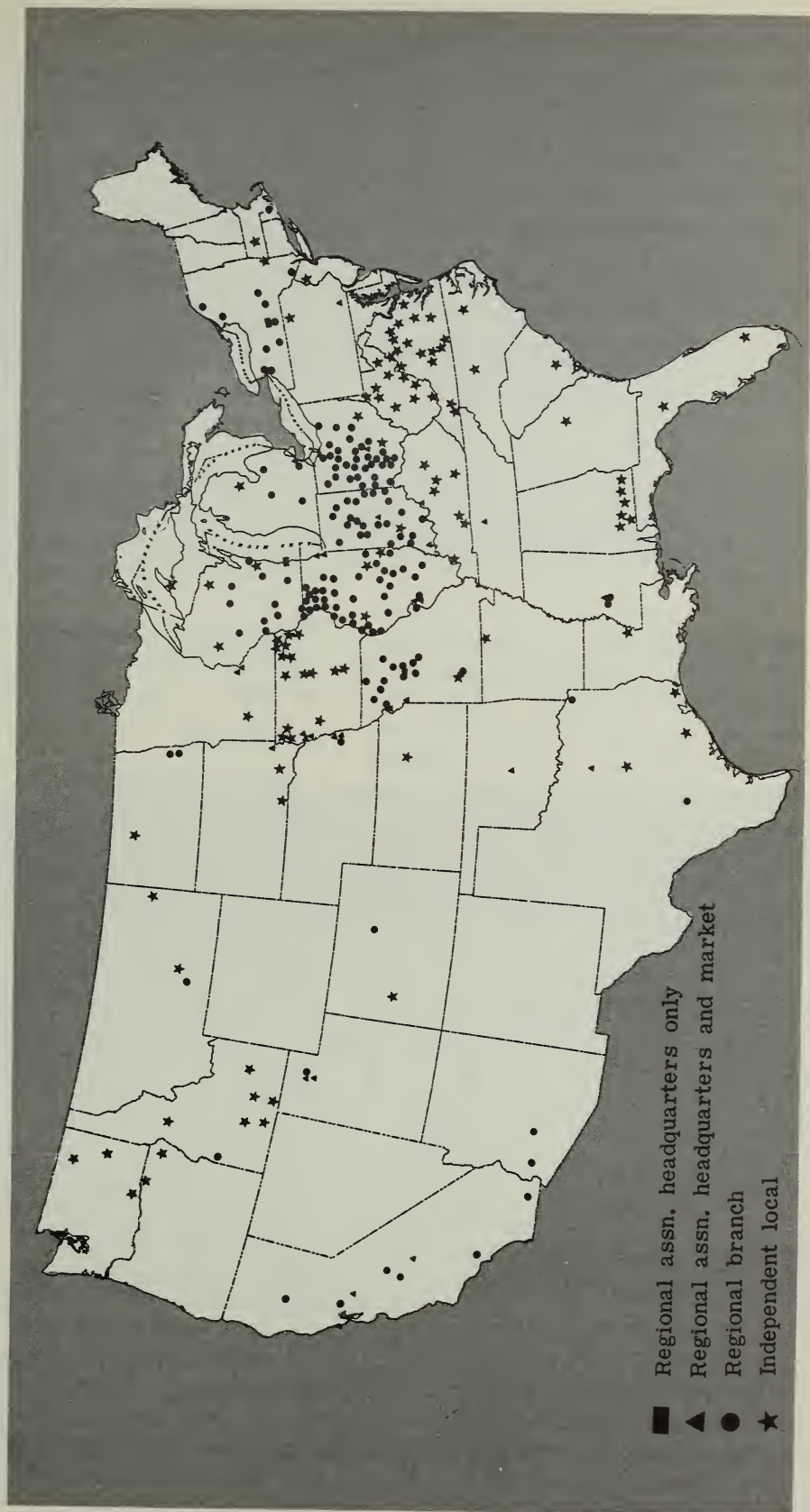
Success finally came in 1917, when the Farmers Union of Nebraska established a sales agency at Omaha. This agency was still operating in 1964. By 1920, the Farmers Union had established four other cooperative agencies on the St. Joseph, Sioux City, Kansas City, and Denver markets. In addition, the California Farm Bureau Marketing Association organized an auction market association in 1918 with headquarters at Hanford, Calif., and branches at several points in the San Joaquin Valley. This association, with headquarters presently at Visalia, Calif., continues to operate auctions.

National Association Formed

About 1920, the American Farm Bureau Federation began to sponsor the organization of cooperative livestock marketing associations. By 1927, 13 cooperative sales agencies had been formed. These associations joined in 1930 to form the National Live Stock Producers Association, a federation with headquarters in Chicago.

In 1964 a total of 31 regional associations were operating at 32 terminal markets and 142 country points (figure 8). Seventeen of

Figure 8.—Livestock marketing cooperatives in operation June 1, 1964.



these large cooperatives are now members of the National Live Stock Producers Association.

Mergers Decrease Numbers

The number of livestock cooperatives has continued to decline over the last 30 years, but the remaining associations have grown larger. Consolidations, mergers, and acquisitions among livestock cooperatives occur rather frequently and account in part for the change in number and size of associations.

In 1962, two large cooperative marketing agencies in Ohio merged, and six Illinois cooperatives consolidated to form one association.

The mergers and consolidations do not mean that farmers have less opportunity to patronize their cooperative. In many cases, the merged associations have increased marketing services and established more market-concentration yards and buying points for hogs, stocker and feeder distribution stations for sheep and lambs and cattle, feeder pig sales, and other facilities.

Cooperative Operation

When first established, most of the sales agencies were set up to operate at terminal markets. It was customary for livestock to be assembled and shipped to market from country points by rail, either by individual farmers or by local shipping associations. At the market, it was received on consignment by cooperative commission sales agencies and sold to packers, feeders, or dealers.

Increased use of trucks and decentralization of packing plant operations brought many changes in livestock marketing methods.

More and more livestock began to move through auctions, concentration points, and direct from producer to packer. This caused sharply reduced volume at many of the larger terminal markets.

To meet these changed conditions and to maintain or expand volume, many cooperatives set up machinery to service their members at country points. In some instances, they established local concentration yards. Other associations set up branch sales agencies at smaller terminal markets to serve a limited trucking territory. In some areas, farmers organized local auction markets. To coordinate sales and keep prices in line, a number of the various selling agencies exchanged market information daily by telephone, telegraph, or teletype.

Membership

Total membership in livestock associations hit its peak in 1948-49, when an estimated 964,000 farmers marketed their livestock cooperatively. After that time the number of members declined and in 1961-62 stood at 785,000.

Membership provisions vary somewhat among livestock cooperatives, but most of them follow the practice of admitting to membership all growers who patronize the association. In a few cases, patrons are required to become affiliated with a general farm organization sponsoring the cooperative before being accepted as members.

In other instances, the purchase of a share of common stock in the association is evidence of membership. A few associations require a written application for membership and upon its acceptance issue a membership certificate.



Cooperatives serve the needs of all types of livestock producers. Range and farm flock sheep producers as well as lamb feeders use cooperatives to market their sheep and wool, and to purchase replacement breeding stock and feeder lambs.



Where savings are distributed, most associations pay patronage refunds to members and nonmembers alike.

Services

Livestock cooperatives represent producers at livestock markets. They seek to improve the business methods used in marketing and provide service at cost. These farmer-owned organizations have pioneered in reducing marketing costs, saving their patrons thousands of dollars through lowered commission charges and patronage refunds.

Cooperatives have also helped to obtain better market procedures, improved facilities, and more efficient services from stockyard and transportation agencies. At several markets, cooperatives have been instrumental in bringing in or developing additional buying competition; this has strengthened the prices paid for all livestock sold at those markets.

In addition to representing producers at the market, several cooperatives have instituted order selling services. They sell large volumes of livestock, primarily

hogs and lambs, direct to packers by telephone.

Most associations also offer an order-buying service. They purchase for their members and patrons thousands of carloads of stocker and feeder animals, both at terminal markets and from range producers. Both order buying and order selling services continue to grow.

Membership in the National Live Stock Producers Association allows cooperatives to provide their members and patrons a wider variety of services. This organization does no marketing but provides its member agencies with such services as credit, research, market information, and legal assistance. It publishes a monthly livestock magazine. The national association also carries on educational work, represents its members in legislative matters, and performs public relations service for them.

Livestock cooperatives have saved farmers and ranchers millions of dollars in recovery of overcharges on freight and in claims for losses on livestock in shipment.

Development of larger feedlots is opening new market opportunities. Many head of livestock are fed to slaughter condition in these more specialized operations. Some of the feedlots handle as much livestock as some of the well-established market centers. Cooperative feedlots are in existence in North Dakota, Montana, Washington, Oregon, Oklahoma, California,

Cooperatives have been in the forefront in encouraging farmers to improve the quality of their livestock. One way to do this is to grade and pool livestock and sell it on the basis of merit as this cooperative does with hogs.



and Arkansas. Other cooperatives are planning to add services of this kind for their patrons.

In Texas, Oklahoma, and Kansas, the cooperatives offer a pasture service to help their members locate and rent suitable pastures and move their cattle to them.

Livestock cooperatives support official standards for grades of livestock. They hold grading demonstrations to teach livestock producers differences between grades. Cooperatives disseminate reliable market news to producers through radio, market newsletters, and the press. Through their field service, educational meetings, market and feedlot tours, motion pictures, publications, and pamphlets, they bring about improved methods of production, feeding, sanitation, and marketing.

Credit Facilities

Livestock producers and feeders have developed, and now own, facilities for providing themselves with the credit needed to carry on their businesses. During the period 1923-33, stockmen capitalized several livestock credit corporations as subsidiaries of their marketing cooperatives. These were organized to make loans to farmers and feeders with funds obtained by discounting borrowers' notes with the Federal Intermediate Credit Banks.

About a dozen of these loan or credit companies are affiliated with livestock marketing cooperatives at such widely scattered points as San Francisco in the West, Chicago in the North, and Fort Worth in the South. Six are affiliated with the National Feeder and Finance Corporation, a subsidiary of the Na-

tional Live Stock Producers Association at Chicago.

Other livestock credit companies are affiliated with the regional marketing agencies. Farmers borrow from these corporations at reasonable rates of interest chiefly to finance cattle on the range or in the feedlots in the Midwest. Some of them, however, also borrow to finance range sheep or to feed lambs.

Process Meat

Early cooperative slaughtering and meat processing met with little financial success. The first attempt on the part of cooperatives to enter the meat processing business was at La Crosse, Wis., in 1914. During the period from 1914 to 1919, some 13 cooperative meat processing plants were organized. Most of them were in Wisconsin, Minnesota, and the Dakotas. All these early organizations failed, most of them shortly after being started.

The principal causes leading to these failures were unsound promotion by nonfarm interests, lack of producer support, insufficient capital, inability to obtain capable management, and unsatisfactory sales outlets.

In contrast to these early attempts, most later efforts at cooperative meat processing were less promotional and the plants were smaller. Despite this fact, several of these ventures ultimately failed. Producers in the vicinity of Centralia, Wash., and Clackamas, Oreg., organized small meat packing plants following World War II, but both failed. The Detroit (Mich.) Packing Company, a medium-sized plant, operated as a cooperative for 21 years and was sold to private interests in 1954.

Today three cooperatives carry on successful meat processing businesses. A well-known farm supply cooperative, Missouri Farmers Association, operates two plants as a meat packing division. One plant, purchased in 1946, is located at Springfield, Mo. The other, a small beef slaughtering plant, was built at Macon, Mo., and started operating in 1961.

Farmers in Virginia own and operate the Shen-Valley Meat Packers, Inc., Timberville. This cooperative began operating late in 1949. It is expanding its output and serving more livestock producers each year of operation.

Both the Missouri and Virginia cooperatives kill cattle and hogs and produce and distribute a fairly complete line of packinghouse products.

The most recent development in cooperative meat processing occurred in 1961 in Iowa when Farmbest, Inc., Denison, began operating a cooperative hog slaughtering plant. A second plant started operating at Iowa Falls in 1963. This cooperative sells hog carcasses to processors as well as processing a portion of its output in its own facilities for sale to distributors. These plants have been encouraged by Consumers Cooperative Association, Kansas City, Mo., primarily a farm supply cooperative.

Increased interest has developed in the cooperative meatpacking business. With changing marketing patterns and the emphasis on more control from production through distribution, cooperative meatpacking could grow. The chances for success of such enterprises are much greater today than they have been in years past because it is possible to obtain capable man-

agement and the capital necessary to support them.

Aside from these operations, all the development in cooperative meat processing in recent years has centered around locker plant slaughtering and processing. A few cooperative frozen food locker plants are slaughtering, processing, and merchandising meat and sausage on a commercial scale (page 299).

New Developments

Livestock cooperatives have served their members well in the past. The future depends upon their ability to meet the challenges in developments that are coming about through the increase in size of operations; decentralization of the packing industry; and the integration and control of production, marketing, slaughtering, processing, and distribution by fewer groups than has been true in the past.

The expansion in number of local markets provides a place to sell livestock near areas of production. Large terminal livestock markets are less significant from the standpoint of volume handled and their price registering importance that made them attractive in the past. Many of the older markets are drawing their receipts from a smaller territory and becoming more local in nature.

The closing of several terminal markets has caused some cooperatives to seek other facilities for handling livestock. This occurred in the New England and Middle Atlantic States, at Billings, Mont., Spokane, Wash., and at South San Francisco and Los Angeles, Calif.

Livestock cooperatives that are trying to meet the needs of their



Farmers have some cooperative meat packing plants. Three examples are: Shen-Valley Meat Packers, Timberville, Va. (above left); the hog slaughtering facilities of Farmbest, Denison, Iowa, at right; and Missouri Farmers Association, Springfield, Mo., below. These meat packing plants illustrate the many fields in which cooperation can work to bring added income to farmer-members.





Cooperative feedlots bring off-the-farm feeding and marketing opportunities that otherwise might not be available to livestock producers. They also provide additional markets for local grain growers.

producer members are taking these steps:

1. Examining new techniques which assist in improving the quality of livestock such as swine testing stations for meat-type hogs, production stations to produce superior breeding stock for farmers, heifer calf improvement programs, and increased production of high-quality feeder pigs and the meat-type beef animal.

2. Checking the feasibility of adapting automatic data processing techniques to office and operational procedure as a management tool to reach decisions faster and more accurately.

3. Determining if there is a possibility of a greater degree of integration to help livestock producers control their livestock further

along the marketing channels to the final consumer.

4. Determining if specialized marketing of only one species of livestock can benefit the farmer.

5. Examining whether the specialized handling of stocker and feeder animals should be considered separately from the handling of slaughter livestock.

6. Exploring how direct marketing negotiations can be handled for the livestock grower to maintain or improve his bargaining power.

7. Studying and developing the role of contracts between farmer cooperatives and slaughterers.

8. Determining the place of the cooperative livestock feedlot in the total livestock marketing picture as a total to improve returns to growers.

9. Studying the place of cooperative slaughtering and processing plants as a means of marketing animals.

10. Considering the potential benefits of consolidations and mergers to strengthen bargaining power.

11. Studying the feasibility of joint endeavors with farm supply and other cooperatives to increase effectiveness and operational efficiency.

12. Studying the feasibility of pooling individual and small lots of animals to supply demands of larger purchasers.

The future of livestock cooperatives depends largely upon the degree to which they can adapt their programs to changing trends. Joint and unified action between all cooperative groups will be necessary to realize the potentials arising from new developments.

Wool

WOOL marketing cooperatives have years of experience behind them. From this experience cooperatives have evolved various methods of marketing the growers' wool. But there has been no definite pattern of agreement among producers or their cooperatives as to what marketing methods are best for grower satisfaction and highest net returns. Logical reasoning can support each type of marketing under given circumstances. Because of this wide divergence of opinion, wool growers sell wool in many different ways.

The volume of wool marketed cooperatively fluctuates sharply, depending upon market activity and price at shearing time. A total of 276 cooperatives of all types handled an estimated 55 million pounds of wool in 1962, or approximately 22 percent of the total yearly U.S. wool production.

Net sales of 182 cooperatives, whose business was predominately wool marketing, amounted to almost \$21.4 million. An additional 94 associations of other types marketed wool as a sideline. Their net sales were valued at \$2.9 million. Total membership in all these co-

operatives was approximately 105,000 (table 11).

Local Pools

As early as the 1840's, New York State growers cooperated in selling their wool through "depots." In 1873, the patrons of the Grange organized wool pools in Ohio. Farmers near Goodlettsville, Tenn., started to sell their lambs and wool through the Goodlettsville Lamb and Wool Club in 1877.

Since these early days, many pools have been operated for varying periods of time. In 1961, a total of 231 local wool pools were operating in 29 States (figure 9). They served some 36,000 growers.

Importance

Wool pools play an important marketing role in Idaho, Montana, Oregon, Utah, Wyoming, and Washington in the West; and in Pennsylvania, New Jersey, Virginia, West Virginia, Tennessee, and New England in the East. In 1961, growers marketed an estimated 16 million pounds of wool through local pools.

Membership in local wool pools

Table 11.—Wool and mohair cooperatives: Estimated number of associations, membership, and value of sales, by specified periods, 1931–62

Period	Associations	Memberships	Value of sales ¹
	<i>Number</i>	<i>Number</i>	<i>1,000 dollars</i>
1931–35 average.....	125	64,560	17,080
1936–40 average.....	129	59,080	11,460
1941–45 average.....	133	92,900	29,660
1946–50 average.....	120	106,800	32,000
1951–55 average.....	145	107,771	33,613
1955–56.....	185	119,325	25,425
1956–57.....	183	116,030	24,386
1957–58.....	185	112,335	19,725
1958–59.....	185	110,205	27,822
1959–60.....	184	101,400	22,519
1960–61.....	182	102,020	22,471
1961–62.....	182	104,720	24,258

¹ Net value (excludes intercooperative business) since 1951–52.

ranges from 10 to several hundred growers. The volume handled by each pool varies widely from 3,000 to 636,000 pounds. Typical pools in the Western States market on the average about 125,000 pounds of wool. Those handling wool for smaller growers in the Eastern, Southern, and Midwestern States average about 45,000 pounds a pool.

The county or local pools formed the foundation for the organization of early regional wool marketing cooperatives in South Dakota, North Dakota, Iowa, Virginia, West Virginia, and other States.

Organization

Wool pools are easy to organize when growers believe they can improve their returns from wool through local cooperative action. Most pools are informal cooperatives, but some are incorporated.

The members usually elect a committee or board of directors of 3, 5, or 7 men to act for them. The directors decide on marketing procedures for each year and employ or appoint a part-time manager.

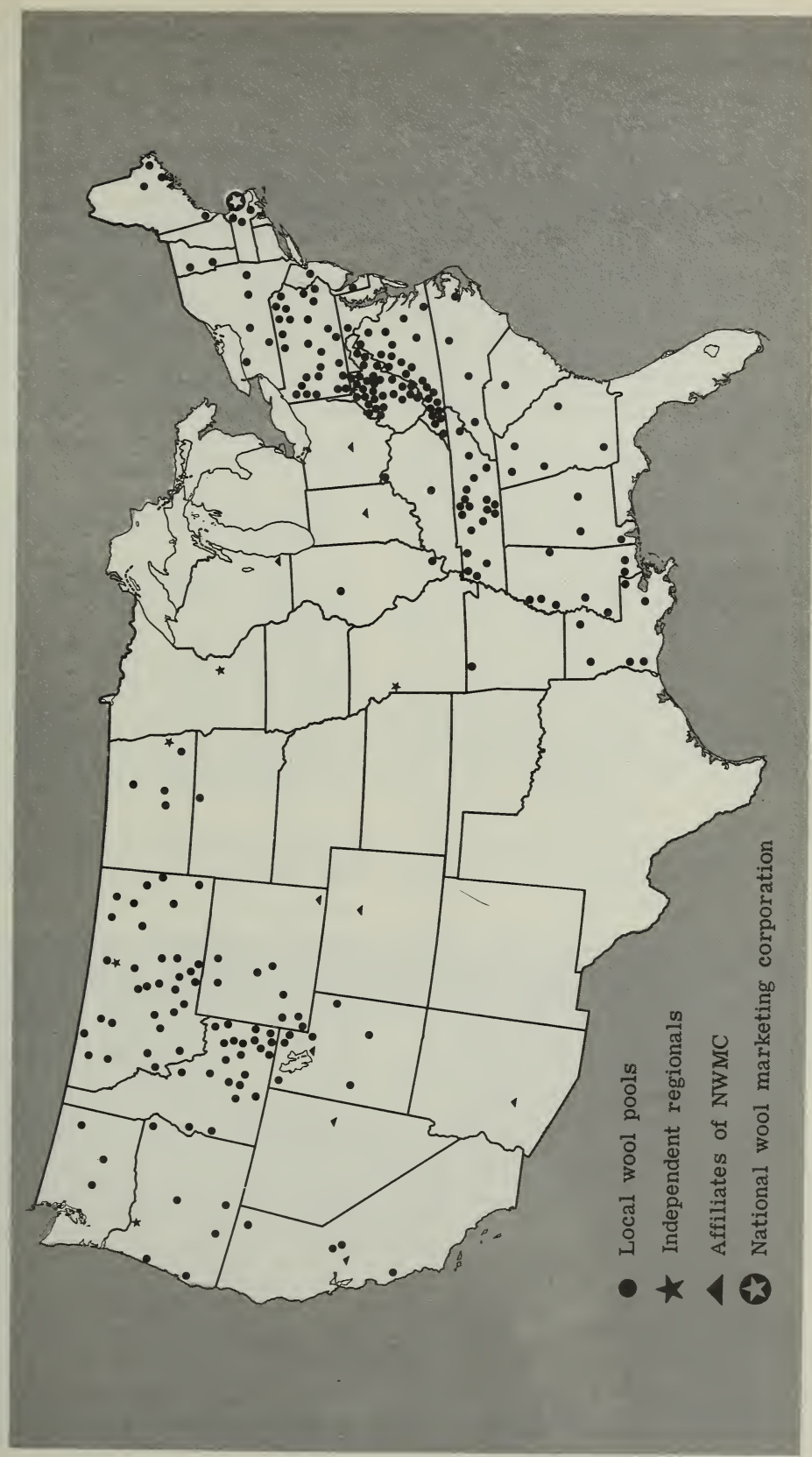
County agricultural agents and local bank employees have frequently contributed their time and have been helpful in selling the wool and distributing sales proceeds.

Operating Methods

The directors may decide to sell the pooled wool either before or after shearing, or to consign it to a merchant, warehouseman, or regional cooperative. Members' clips may be handled separately, or the entire pool may be offered as one lot. The wool may be sold at private treaty or by sealed bid. The clips may be graded or sold in the original bags. Members may all receive the same price, or different prices, depending on the marketing methods and procedures chosen by the directors.

Members of a pool usually bring their wool to a local point for weighing and shipping. The pool manager may have the wool "rough-graded" and repacked before shipping. If the wool sells for cash, the pool pays each member in full for his wool on, or shortly after, the shipping date.

Figure 9.—Wool marketing cooperatives in operation, 1961.



However, if the grower consigns his wool he can receive an advance on shipping date and a final payment from the consignee after the wool is sold for the pool's account.

Pool Advantages

Pools offer producers an opportunity to obtain the following advantages and services:

1. Little or no capital required.
2. Sufficient volume to attract competition between more or better buyers and between consignment handlers.

3. Improvement in the grower's bargaining position through having more experienced and competent men deal with buyers or consignment handlers.

4. Savings on freight costs because of larger volume and shipment in carload lots.

5. Opportunity to market each clip more nearly according to merit, thus providing incentive for growers to produce the most

profitable types of wool as well as to do a better job of preparing it for market.

6. Total expenses averaging about 1 cent a pound of wool sold.

7. Lower costs on bags and paper fleece-twine.

8. Coordinated shearing services.

9. Better-informed producers through contact with other producers and Extension Service specialists.

10. Opportunity to buy and rotate breeding stock.

Pool Disadvantages

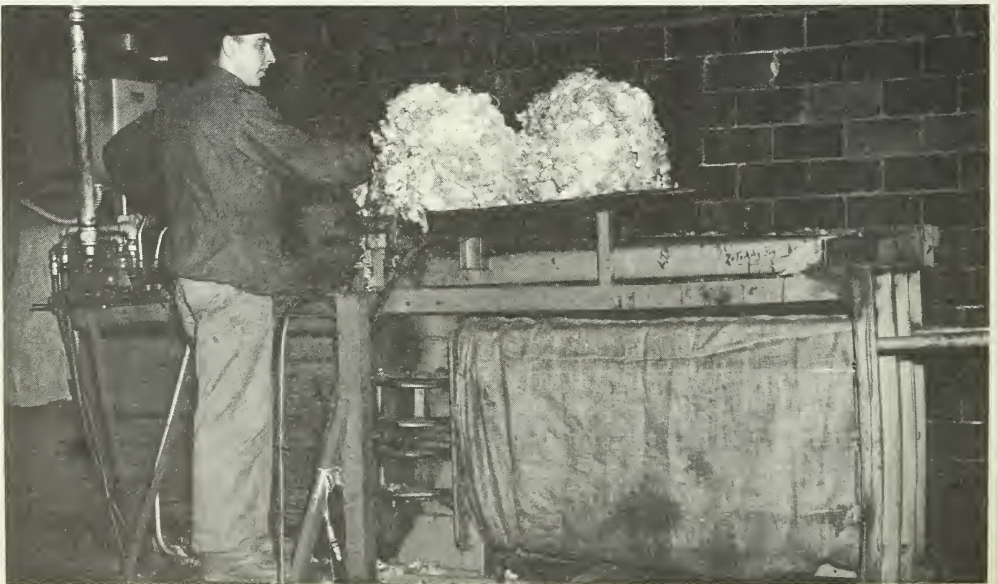
Some of the problems faced by pools are:

1. Many pools do not have enough volume to attract good buyers.

2. They fail to sell wool on a merit or graded basis.

3. In forward or preshearing sales, they are unable to guarantee buyers quantity to be delivered.

Cooperatives pioneered in the development of new wool handling methods and equipment such as wool baling, which reduces handling, storage, and transportation costs.



4. They build no loyalty because of lack of rigid requirements pertaining to participation.

Regionals

To obtain even greater benefits than those realized from local pooling, wool growers organized regional cooperatives. These associations serve one or more States and provide more complete wool marketing services than local pools.

Most regional cooperatives have become important handlers of wool in their respective trade areas. However, some associations lacking good management have gone out of business.

The typical regional wool marketing cooperative is controlled by a board of about a dozen directors elected by its grower-members. Any grower who markets his wool through the cooperative is eligible for membership and has equal rights and privileges with all other members.

About 78,000 growers marketed 31.6 million pounds of shorn wool through 20 regional wool cooperatives in 1961. Sixteen of these were affiliated with the National Wool Marketing Corporation, Boston, Mass.

Regional cooperatives serve wool producers in areas where sheep production tends to be concentrated on farms and specialized ranches. They are most successful where they can obtain large quantities of wool.

Marketing Services

Some of the State and regional wool marketing cooperatives operate their own warehouses in their trade areas. Others ship their wool to large market centers for

storage and sale. All associations that operate warehouses have full-time managers, but some associations without warehouses have only part-time managers.

Cooperatives have always advocated the orderly marketing of consigned wool. They stress marketing wool according to the merit of individual clips. Therefore, they encourage members to improve the quality of their wool through good production and shearing practices. Several associations also offer a warehousing service for growers who do their own selling.

The field services of wool cooperatives include: Education and publicity among growers, soliciting consignments, purchasing wool to fill forward sales, making payments to growers, and receiving and shipping wool. The local agent or fieldman for the cooperative, sometimes with the help of the manager, performs these services.

Operating Methods

A majority of the cooperatives handle most of their wool on consignment. However, during recent years the trend has pointed to forward selling of wool for later delivery to manufacturers. Some forward sales have been fulfilled by the cooperatives purchasing the required wool from grower members.

When wool is to be handled on consignment or purchased before shearing, the grower can obtain a preshearing advance from his association. The advance depends on wool prices.

When consigned wool is delivered to a cooperative, the grower can receive a commodity advance, a large part of the market value. After consigned wool is sold, the

cooperative sends a final accounting to the grower.

After paying expenses incident to handling the wool, the cooperative allocates all savings to patron members. The savings may be returned to the members immediately in the form of patronage refunds paid in cash, or they may be retained in the cooperative for a number of years and used as operating capital before being distributed. The income of the cooperative comes from commissions charged on consigned wool and margins on purchased wool.

Wool received at the cooperative's warehouse usually goes into temporary storage. Here wool received from hundreds of members is graded into large uniform lots. The large lots of graded wool can be sold to manufacturers at better prices than can be obtained by selling small nonuniform lots. The regional wool cooperatives place special emphasis on grading. However, some of the large western clips are uniform enough to sell to advantage in the original bags without grading.

Salesmen who work for the regional cooperatives are selected and employed on the basis of their selling ability and knowledge of wool. The salesmen deal directly with mill buyers who are also expert in appraising wool.

The usual procedure is for the salesmen and the buyer together to inspect the wool in sample bags or in graded piles. They then come to an agreement on a price per pound—clean wool basis. Finally they agree on the shrinkage (percentage of dirt and grease) to figure a grease price. The shrinkage may be estimated or measured by technical procedures.

Cooperatives also sell some wools by description—without the buyer being present.

Selling by description has not yet been highly developed. However, regional cooperatives are attempting to improve methods and procedures for forward selling on that basis.

Mill buyers must have a high degree of confidence in the seller before they will buy wool by description. Nearly all forward sales (for delivery at a later date) are made that way. The business of forward selling has been attractive to cooperatives and their members at various times.

Nationals

The National Wool Warehouse and Storage Co., Chicago, Ill., was organized in 1909, largely by western wool growers who were dissatisfied with selling for cash to wool dealers. The company sold stock to obtain money for operating capital and for building a 25-million-pound warehouse in Chicago. It handled all wool on consignment for local pools and growers.

The company worked closely with leaders among wool growers in organizing several State wool cooperatives. During the spring of 1920, wool prices dropped drastically after commodity advances made to growers by the company proved to be higher than the sales value of the wool. Because many over-advances were uncollectible, these high advances left the company in debt and ultimately caused its liquidation in 1924.

The National Wool Exchange, which can be considered as a successor to the National Wool Warehouse and Storage Co., began oper-

ations in 1925 with headquarters in Boston. The Exchange handled and sold wool on consignment from local and State cooperatives and large growers, but made no pre-shearing or commodity advances. Financing services were handled by member growers and State cooperatives.

The exchange fostered organization of several State wool cooperatives. It handled wool for cooperatives in Montana, Idaho, Wyoming, South Dakota, Colorado, Nevada, Illinois, Utah, North Dakota, and New York. It obtained capital by selling stock, borrowing from banks, and retaining savings in a revolving fund account.

The organization and operation of the National Wool Exchange was an important chapter in the history of cooperative wool marketing. Strictly a sales service organization, much of the Exchange's experience was gained during a period of declining prices, which usually make consignment marketing unattractive. However, the Exchange helped to demonstrate that growers could improve their bargaining position by selling cooperatively.

The National Wool Marketing Corporation was organized by growers in 1929-30 with financial and organizational support from the Federal Farm Board. This was accomplished by the passing of the Agricultural Marketing Act on June 15, 1929 (46 Stat. 11) and had two main tasks: (1) To aid in preventing and controlling surpluses of any agricultural products, and (2) to encourage the organization of farmers into effective cooperatives and promote the establishment and financing of

farmer-owned and -controlled cooperatives.

Volume sold by this cooperative has varied widely since its organization from a high of almost one-third of the Nation's 1930 shorn wool crop to 6 percent in 1936 and about 14 percent in 1963.

Leaders in cooperative wool marketing have long recognized the desirability of having their own sales representatives show their wool to mill buyers at the principal markets. They have also recognized the desirability of their cooperative having a strong bargaining power with banks so that they can obtain adequate finances at low interest rates.

Opportunities for Improvement

Some cooperatives have made outstanding progress in improving wool marketing. If wool growers are to be served better, their associations must cope with a wide variety of problems. Past experience, study, and experimentation with the help of wool growers will develop opportunities for improvement.

The kinds and scope of opportunities for improving wool cooperatives will vary from location to location. Goals the more progressive ones have set include the following:

1. Increasing volume to be in a better bargaining position.
2. Returning prices more nearly in line with merit of individual clips.
3. Improving sheep to improve total wool quality.
4. Preparing fleeces and clips better for ultimate processors and users.

5. Obtaining more and better market information and using it to reach decisions on when and how to sell.

6. Reducing costs of operations through improvements in handling, grading, and transportation.

7. Improving organizational structures.

8. Working more closely with other cooperatives in considering consolidations, mergers, or federations of existing cooperatives to

improve their efficiency.

9. Improving educational techniques to reach membership and potential users of the cooperatives.

10. Improving public relationships with mill buyers and processors of wool.

The future of wool marketing cooperatives depends upon how much the growers, directors, and employees capitalize upon the opportunities in the competitive wool marketing environment.

Poultry and Egg Cooperatives

by John J. Scanlan
Chief, Poultry and Egg Branch

PRODUCER cooperatives have played an important part in marketing eggs and poultry in the United States. This cannot be measured by statistics alone because many of the benefits, contributions, and accomplishments are intangible.

Particularly in an agricultural industry where revolutionary changes occur as rapidly as in poultry, there is need and a challenge for cooperatives to take the lead in helping producers meet the new conditions in both production and marketing.

Development Relatively Slow

FOR a number of reasons, cooperation among producers of eggs and poultry has not developed nationally as rapidly as it has among producers of other farm products such as citrus, dairy, and grain.

Of the total net value of farm products marketed by 6,422 associations in 1961-62, poultry products constituted only 4.2 percent. Incomplete figures indicate that about 10 percent of the eggs, 5 percent of the broilers, 19 percent of the turkeys, and less than 2

percent of the farm chickens are marketed cooperatively.

Number of Associations

Table 12 shows the changes since 1931 in the number of specialized egg and poultry marketing cooperatives, their memberships, the total number of cooperatives of all types handling eggs and poultry, and the total net value of the poultry products handled.

The number of specialized egg and poultry marketing coopera-

Table 12.—Egg and poultry cooperatives: Estimated number of associations, membership, and value of sales, by specified periods, 1931–62

Period	Associations		Member- ships ²	Value of sales ³
	Specialized	All ¹		
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>1,000 dollars</i>
1931–35 average.....	158	-----	83, 400	59, 000
1936–40 average.....	183	-----	105, 500	79, 800
1941–45 average.....	163	-----	122, 720	176, 800
1946–50 average.....	136	-----	130, 391	271, 592
1951–55 average.....	148	690	125, 110	341, 550
1955–56.....	143	662	115, 430	358, 004
1956–57.....	145	681	120, 630	364, 073
1957–58.....	142	662	108, 950	356, 889
1958–59.....	131	659	100, 485	391, 566
1959–60.....	125	613	96, 960	390, 488
1960–61.....	118	567	84, 525	423, 938
1961–62.....	112	535	83, 155	422, 928

¹ Including both specialized and other cooperatives handling poultry products. Figures not available until 1950.

² In specialized associations only.

³ Net value (excludes intercooperative business) of eggs and poultry handled by all cooperatives since 1951–52.

tives has steadily declined since the high average of 183 in the 1936–40 period. The lowest year to date was 1961–62 with 112 cooperatives.

This decline in number has been due to three causes—mergers and consolidations, discontinuances, and changes in classifying the co-operatives when the value of other products or commodities handled exceeded that of poultry products.

The average number of members of specialized cooperatives reached 130,000 in 1946–50 and dropped to 83,155 in 1961–62. The drop reflected the sharp decrease nationally in the number of egg and poultry producers.

Beginning in 1950, Farmer Co-operative Service showed the number of all cooperatives that handled eggs and poultry, including the specialized marketing associations. The number decreased from an average in 1951–55 of 690 to 535 in 1961–62.

A steady increase has taken place in the net sales value of eggs and poultry by cooperatives. In 1951–55, the 690 cooperatives handled poultry products in the amount of \$342 million. By 1961–62, the amount had increased to \$423 million.

The 112 specialized associations did a net business of \$232 million, or 55 percent of the total value of all egg and poultry marketing co-operatives in 1961–62. The 423 co-operatives of other types handled poultry products with a net value of \$192 million as a sideline. Of these other types, farm supply co-operatives were the most numerous with 229. Dairy cooperatives were second with 136.

Some associations that started as poultry cooperatives increased their sales of feed and other farm supplies and became classified as farm supply cooperatives.

In 1961–62, California, with \$56

million, ranked first in net value of cooperatively marketed poultry products. Minnesota was second, and Georgia third. Virginia and New York each marketed cooperatively \$25 million.

The slower growth of cooperative marketing of poultry products has been due to several causes. Formerly nearly every farm in the United States kept some poultry although the flocks were small, usually of less than 200 birds.

Until recently, most farmers regarded poultry production as a sideline and thought its marketing merited comparatively little attention. Eggs and poultry not consumed on the farm were usually sold by the farmer's wife for cash to local egg and produce buyers or exchanged for groceries and other household supplies at stores in nearby towns.

Under such conditions, the volume of poultry products available in any one area was usually too small and scattered to support a cooperative. Production practices were not generally geared to high-quality products. Thus the cooper-

ative marketing of poultry products was limited in the earlier years to the more commercial and concentrated areas of egg and turkey production in the Northeast and the West.

Geographic Location

Table 13 shows, by geographic divisions, the number and percentage in 1961-62 of the 112 specialized poultry marketing cooperatives and of the 535 cooperatives handling poultry products. The West North Central division led with 27.8 percent of the specialized associations and with 62.0 percent of all cooperatives marketing poultry products. The smallest percentages of both tended to be in the New England, East South Central, and Mountain divisions.

Table 14 shows the net sales value of poultry products marketed by the 535 associations handling these products and the estimated number of memberships of the 112 specialized poultry cooperatives.

The South Atlantic States with only 6.7 percent of all cooperatives handling poultry products lead in

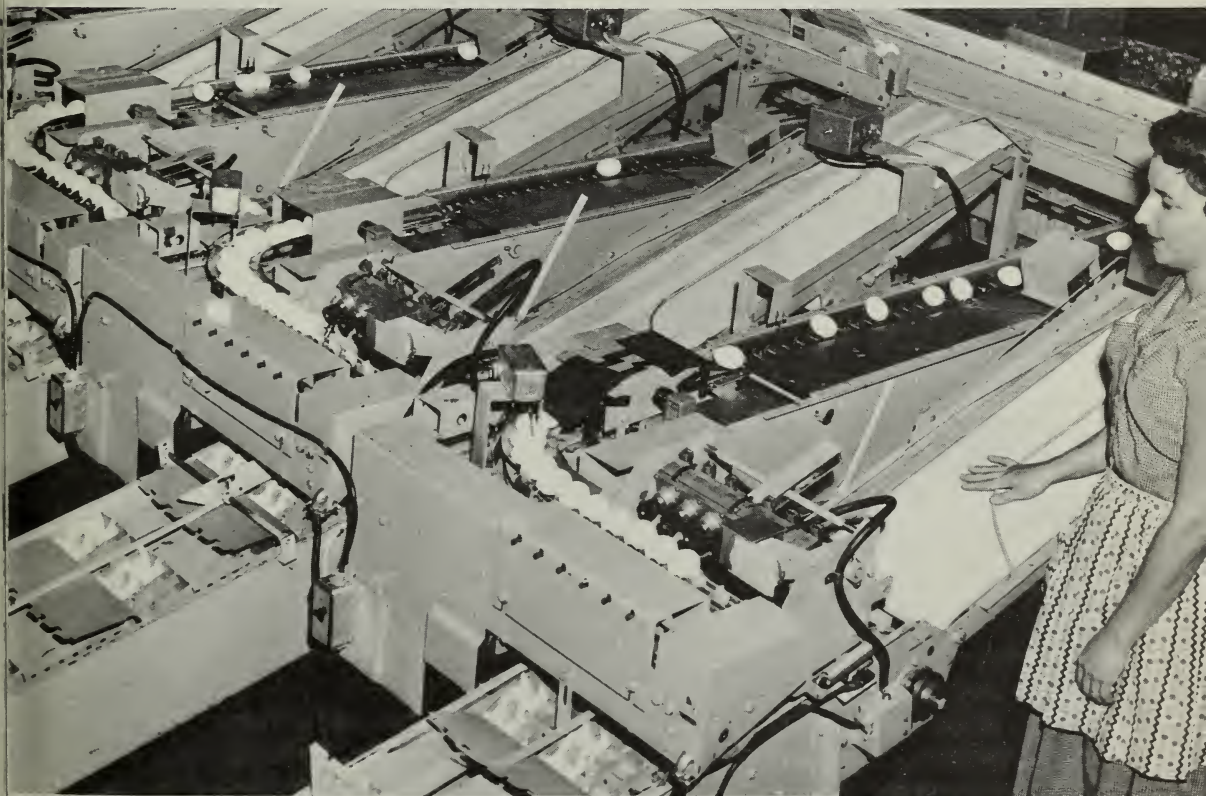
Table 13.—Number and percentage of specialized and all associations handling poultry products by geographic divisions, 1961-62

Geographic division	Specialized associations		All associations	
	Number	Percentage	Number	Percentage
New England.....	2	1.8	9	1.7
Middle Atlantic.....	27	24.1	35	6.5
East North Central.....	16	14.3	50	9.3
West North Central.....	31	27.8	331	62.0
South Atlantic.....	14	12.5	36	6.7
East South Central.....	2	1.8	22	4.1
West South Central.....	7	6.2	27	5.0
Mountain.....	6	5.3	10	1.9
Pacific (and Hawaii).....	7	6.2	15	2.8
Total United States.....	112	100.0	535	100.0

Table 14.—Net value of sales of poultry products of all associations handling poultry products and estimated memberships of specialized poultry cooperatives with percentages, by geographic divisions, 1961–62

Geographic division	Net value of sales		Estimated memberships	
	Value	Percentage	Number	Percentage
	<i>1,000 dollars</i>			
New England.....	15, 379	3. 6	670	0. 8
Middle Atlantic.....	60, 071	14. 2	18, 205	21. 9
East North Central.....	41, 765	9. 9	25, 160	30. 3
West North Central.....	73, 622	17. 4	14, 155	17. 0
South Atlantic.....	89, 162	21. 1	8, 825	10. 6
East South Central.....	32, 942	7. 8	525	. 6
West South Central.....	9, 947	2. 4	375	. 5
Mountain.....	15, 300	3. 6	4, 425	5. 3
Pacific (and Hawaii).....	84, 740	20. 0	10, 815	13. 0
Total United States.....	422, 928	100. 0	83, 155	100. 0

Cooperatives use highly mechanized plant equipment to maintain low handling costs. The plant of Rockingham Cooperative Farm Bureau, Inc., Harrisonburg, Va., counts, weighs, and cartons eggs automatically.



the net value of sales of poultry products with \$89 million, or 21.1 percent of the U.S. total.

Broilers comprise a large part of the sales of this area. The Pacific division, with only 2.8 percent of the cooperatives handling poultry products, is second in net sales value with 20 percent of the U.S. total. The West North Central and Middle Atlantic divisions follow in relative importance.

The total estimated membership of the 112 specialized cooperatives in 1961-62 was 83,155. The East North Central cooperatives had the largest number of members with

30.3 percent of the total, followed by the Middle Atlantic with 21.9 percent and the West North Central with 17 percent.

The North Central divisions lead in number of both specialized poultry and all cooperatives handling poultry products. Together they have nearly half the memberships of specialized poultry cooperatives. Yet the South Atlantic and Pacific divisions exceed them individually in sales value of eggs and poultry. This is due to the handling of large volumes of eggs, broilers, and turkeys by a small number of large cooperatives in these areas.

Early Efforts

IN 1874, the Illinois State Grange made the earliest recorded effort to establish a cooperative to market poultry and other farm products. This venture was short-lived, however, and almost 20 years passed before poultry producers made an-

other attempt at cooperative marketing.

In 1916, the Poultry Producers of Central California was organized and superseded the several small egg marketing associations in the area north of San Francisco.

Much of the early cooperative handling of eggs and poultry was by cooperative creameries, elevators, and farm supply associations.



Producers made efforts to establish egg and poultry cooperatives in Minnesota, New Jersey, New York, Oregon, and Wisconsin from 1905 to 1914.

In 1913, community egg circles began to appear. Egg producers organized these informal local associations for the sole purpose of marketing eggs. Each operated independently. Some of these egg circles attempted some form of grading.

During the 10 years following 1913, egg producers formed a considerable number of such circles in many States. However, the popularity of this method of egg marketing was of short duration. Although egg buyers occasionally paid the circles 1 or 2 cents more a dozen, because they could thus purchase eggs in larger lots, results for members were not entirely satisfactory. Fluctuation in volume handled and their loose informal nature were handicaps.

During the years immediately following the organization of the Tulare Cooperative Poultry Asso-

ciation, Tulare County, Calif., in 1913, associations were formed in California, Washington, and Oregon. Several confined their efforts to marketing eggs, but others also handled live and dressed poultry.

From 1920 to 1939, the rate of discontinuance was greater among egg and poultry cooperatives than for any other major commodity marketing group of cooperatives. Many discontinuances followed efforts in other areas to set up small associations, usually of the western pool type.

Later, area differences in production as well as in marketing led to setting up associations of several types more closely patterned to the local situation.

Principal benefits from these early efforts were correction of local abuses and certain minor gains. These experiences, together with unsatisfactory market outlets later, encouraged producers in many areas to continue attempts to improve methods of marketing poultry and eggs.

Regional Differences

REGIONAL differences developed among the cooperatives that marketed eggs and poultry as to type, number, and size.

The West

Although many attempts were made elsewhere, the first successful associations, and some of the largest, for handling eggs and poultry developed on the Pacific Coast. The advent of large commercial

poultry farms, especially in California, led to surplus egg production with consequent difficulties in marketing. This caused producers to set up their own egg marketing agencies.

Early Associations

Some currently operating associations in the Pacific and Mountain States that market poultry products, with dates of organization, were: Poultry Producers of Central California, San Francisco,

1916;²⁶ Washington Cooperative Farmers Association, Seattle, Wash., 1917;²⁷ San Diego Cooperative Poultry Association, San Diego, Calif., 1917; Oregon Egg Producers, Portland, 1920; Utah Poultry and Farmers' Cooperative, Salt Lake City, 1923;²⁸ Idaho Egg Producers, Caldwell, 1924;²⁹ Norbest Turkey Growers Association, Salt Lake City, Utah, 1930; and Poultrymen's Cooperative Association of Southern California, Los Angeles, 1931. The last named association was formed by merger of two associations organized in 1912 and 1916.

Current Operations

The large Western cooperative egg and poultry associations usually handle products on a weekly pool basis (see page 201). They may be of the stock or the nonstock type. Most of them have marketing agreements with members.

These cooperatives have initiated many progressive practices. They grade and pool products according to quality and pack most eggs in modern plants owned and operated by the associations, although in some instances eggs are now graded and packed on the farms of large producers or by the receiver. Grade, size of shipment, and other considerations determine relative returns to producers.

²⁶ Later Nulaid Farms. In 1963, it consolidated with Hayward Poultry Producers Association to form Pacific Growers, San Leandro, Calif.

²⁷ Now Western Farmers Association.

²⁸ Now Intermountain Farmers Association.

²⁹ Changed to Idah-Best, Inc., in 1961.

A conservative payment is customary when products are delivered. These payments usually go out as patronage dividends in cash or certificates of equity. Some associations originally deferred all payments for a definite period or until sales value could be ascertained.

These cooperatives merchandise their products by developing trade outlets and consumer demand. They base their operations chiefly on making uniform, high-quality products available to buyers in large and dependable quantities. Although most of the large western associations marketed only eggs at first, some later also marketed both poultry and turkeys.

All the egg marketing cooperatives in the West eventually found it desirable to handle farm supplies—especially feeds—for producers. In a few instances supply purchasing operations grew until they overbalanced marketing operations. Such associations then fell into the category of farm supply cooperatives.

Operations of several of the more extensive western poultry associations are now discussed in some detail.

Pacific Growers, San Leandro.—The operations and history of this association, oldest of the existing egg marketing associations, were more or less typical of the more extensive western marketing cooperatives. This association changed its name to Nulaid Farmers Association in 1960. In 1963, it consolidated with Hayward Poultry Producers to form Pacific Growers.

This association obtained its capital through revolving funds accumulated by a withholding of 1 cent a dozen on all eggs marketed

through it, and an over-charge or margin on feeds and supplies purchased for the members. It had a membership agreement covering a period of 15 years.

Originally established in 1916 to market eggs, this association expanded its operations in 1926 to include poultry marketing and co-operative manufacture and distribution of feed. Feed operations grew steadily, but poultry marketing did not prove successful although tried several times.

In 1959, this association marketed more than 2.1 million cases of eggs and 612,000 pounds of poultry, distributed cooperatively 313,000 tons of feed, and had a total volume of business amounting to \$53 million. At the close of 1959, the association's membership included 10,497 producer members. Of these, 1,169 were egg shippers. Their combined equities in capital funds and reserves of the association totaled \$12.4 million as of January 2, 1960.

The Washington Cooperative Egg and Poultry Association, Seattle.—This association was set up in 1917 to market eggs. At that time it had 150 members and operated only in Washington. Now called the Western Farmers Association, it operates also in Oregon and northern Idaho.

Western Farmers Association, has developed into one of the most successful and progressive associations in marketing poultry products and handling farm supplies. In 1963, it had an active membership of 49,000 and did a business of \$74 million. Of this amount, \$28 million was from sales of poultry products, grain, beans, and seeds, and \$46 million went into purchases of feed and farm production

supplies. The most important of these was feed with sales of \$27 million.

This organization has added several services to its original egg marketing program. These include marketing ready-to-cook and canned poultry and turkeys, frozen and dried eggs, field and garden seed, grain, and dry edible beans and supplying poultry and live-stock feed, fertilizer, farm chemicals, and other farm production supplies to members.

In the pooled marketing of eggs, fryers, turkeys, seeds, and beans, members are under contracts for definite periods and quantities to deliver.

Western Farmers Association operates through 57 farm service branches and dealers of which 48 are in Washington, 8 in Oregon, and 1 in Idaho.

In addition to the service branches and dealers, the association has, among others, the following special service facilities: 5 egg candling stations, 4 poultry and turkey processing plants, 4 feed and 4 seed mills, 10 bulk feed stations, 12 bulk fertilizer plants, a turkey and chicken canning plant, and 1 bean-processing plant. It also has 22 grain receiving plants, 15 liquid fertilizer plants, 5 L.P. gas distributing plants, 2 research farms, and a research hatchery.

The association also operates some 230 trucks for distributing feed and farm production supplies to its members and for collecting eggs and poultry at members' farms and distributing them to market outlets. It uses special trucks to pick up eggs and poultry at the farms of the larger producers as well as to deliver feed in bulk.

Intermountain Farmers Association, Salt Lake City, Utah.—Originally Utah Poultry Producers Cooperative Association, this is one of the largest farmer cooperatives in Utah. Incorporated in 1923, its operations now extend to all parts of Utah and into southern Idaho.

Originally, it rendered the single service to farmers of marketing eggs. Over the years it broadened its activities by marketing fowl, turkeys, and broilers; handling fertilizers, seed, petroleum products, and other farm supplies; and manufacturing and selling poultry and livestock feeds. It is now a cooperative service agency rather than, as at first, a strictly marketing association.

It operates as a centralized association with 25 branches distributing feed and farm supplies, of which 9 receive and grade eggs, and 9 are feed manufacturing and processing plants in addition to their sales function. I.F.A. operates one turkey and fowl dressing plant and five bulk fertilizer distributing plants. It makes egg marketing and turkey processing agreements with its members. It pays for eggs on a weekly pool basis.

In 1962, the association received 125,000 cases of eggs, handled 7.2 million pounds of ready-to-cook chickens and turkeys, and did a total business of marketing and handling feed, fertilizers, and other farm and poultry supplies for its 35,000 members and patrons amounting to \$10.9 million. It has about 4,000 active members; some 500 of these are egg shippers.

In 1963, I.F.A. acquired the Draper Egg Producers and Draper Poultrymen, Inc., egg marketing and feed manufacturing organiza-

tions, respectively. This acquisition increased both feed and egg volume, eliminated the duplication of services, and gave the association a stronger position in marketing and in purchasing farm supplies.

This cooperative has been influential in making poultry production a leading agricultural enterprise in Utah. It has accomplished this by helping producers lower production costs and by packing and selling high-quality eggs and poultry in both local and distant markets on a volume basis at relatively low cost to members. It is a charter member of Norbest Turkey Growers Association.

Norbest Turkey Growers Association, Salt Lake City, Utah.—This association is a sales and service federation created in 1929 by 20 local and statewide turkey marketing associations and pools located in the Mountain and Pacific Coast States. Starting in 1921, turkey pools in operation totaled some 60 by 1929. Their local nature, small volume of product handled, individual operation and marketing effort, and distance from market reduced their potential value to their producer members. These weaknesses influenced the organization of the federation.

In 1963, this federation had 11 member associations located in California, Nebraska, Minnesota, Oregon, Oklahoma, Texas, and Utah. Besides the main office in Salt Lake City, the association has sales offices in Boston, Mass.; Chicago, Ill.; New York City; Los Angeles, Calif.; San Francisco, Calif.; Portland, Oreg.; and Marlin, Tex. In addition, it had sales representatives in Atlanta, Ga.;

Denver, Colo.; Detroit, Mich.; Kansas City, Mo.; Minneapolis, Minn.; Honolulu, Hawaii; and Rotterdam, Holland.

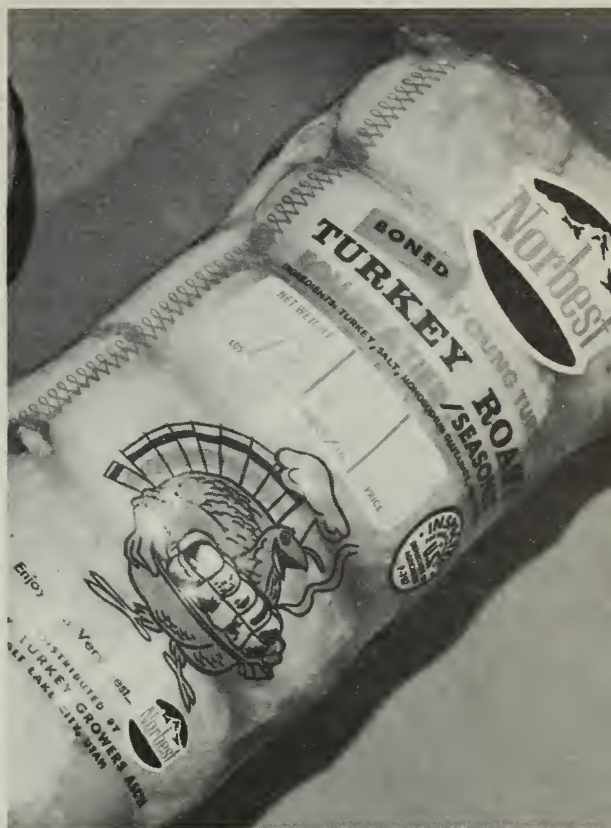
During its first year of operation, Norbest marketed 3.5 million pounds of dressed turkeys for its members. It is now the largest wholesaler of turkeys in the world. An increasingly larger proportion of the turkeys marketed are of the fryer-roaster type. Important volumes are sold cut up and in the form of turkey rolls. It has sold large volumes to European, Asiatic, and South American countries, and to Canada.

The association carries on a year-round educational program to improve the quality of turkeys. As a result of this educational work, the percentage of its U.S. Grade A turkeys has increased steadily and rapidly.

The member associations kill, dress, grade, and pack turkeys. The federation sells all turkeys of the member associations not sold locally by them. It sells U.S. Grade A turkeys under its well-known trade name, Norbest. In addition to marketing turkeys and hatching eggs, the association handles plant supplies for member associations. It makes conservative advances to member associations on processed turkeys.

Through efficient operation, Norbest has reduced marketing costs, increased the number of market outlets, lowered packing and transportation costs, established and improved control over distribution, built up ample reserves, and collected an unusually high percentage of credit accounts.

It has also helped to bring about uniform and standardized grading, quality improvement, and reduc-



Norbest Turkey Growers Association, Salt Lake City, Utah, a sales federation for 11 member associations, pioneered in developing specialized turkey products such as boned, rolled, seasoned, and tied turkey roast.

tion of advertising costs through establishment of an association trademark.

In the West, the handling of poultry products by other commodity groups, farm supply cooperatives, and marketing cooperatives, other than specialized egg and poultry associations, has not been so important as elsewhere. The West has many highly specialized production areas. As a result, specialized egg, poultry, and turkey cooperatives are more generally available to producers.

The Northeast

Before 1930, there were few successful attempts to market eggs or poultry cooperatively in the Northeastern States. Early conditions in this part of the United States were not particularly favorable to forming cooperative poultry marketing associations, especially of the western pool type. The few concentrated areas of production were generally near a market. As a result, a considerable number and variety of nearby outlets were available to producers. These facts contributed to a general lack of interest in marketing eggs and poultry cooperatively in the area.

Later, however, a large number of relatively small but successful egg and poultry marketing cooperatives developed in the Northeast. They were chiefly of the auction type, close to large consuming centers. In 1961, more than 30 associations in the area were marketing eggs and poultry. In total, they marketed more than 6 million cases of eggs and a large volume of both live and dressed poultry. Several handled over 300,000 cases of eggs a year, exceeding some of the large western poultry cooperatives.

An important handler of eggs in the Northeast is the Egg Marketing Division of Cooperative G.L.F. Exchange, Inc., Ithaca, N.Y. (now Agway). This cooperative receives eggs directly from about 1,200 shippers at 5 egg plants in New York and northern Pennsylvania. It then markets them as shell or liquid eggs through a wide variety of outlets in the Northeastern markets. In 1962, it handled 833,000 cases of eggs. This made it the largest cooperative handler of eggs in the Northeast.

Next in volume of eggs handled was Eastern States Farmers' Exchange, Inc. (now Agway) with 750,000 cases. This association, essentially a feed and farm supply cooperative, has 5 egg plants in New England and 2 in Pennsylvania serving over 1,000 producers.

Only one cooperative in the Northeast now processes poultry. It is the Long Island Duck Farmers Cooperative, Inc., Eastport, Long Island, N.Y., organized in 1960. In 1962, the association processed 25 million pounds of ducklings, or about 70 percent of the Nation's production. It has 44 members.

A number of rather distinct types of cooperatives serve egg and poultry producers in the Northeast. Among these are pooling, auction, commission, bargaining, sideline, turkey, broiler, duck, hatchery, hatching egg and breeder, and federations. These are discussed later in this section.

North Central States

In the North Central States, cooperative marketing of eggs and poultry has neither kept pace with nor followed major patterns of cooperative marketing of these products in the West and East.

The average size of egg production units in the North Central States has been smaller. However, from the standpoint of volume of egg, farm chicken, and turkey production, the 12 North Central States make up the most important area in the United States. These States in 1963 produced 35 percent of the eggs, 49 percent of the turkeys, and 33 percent of the farm chickens. However, only 5 percent of the Nation's broilers were produced in this area.

The West North Central States are the source of the bulk of the Nation's surplus of production over local consumption of eggs, farm chickens, and turkeys.

In 1961-62, a total of 42 percent of the Nation's specialized egg and poultry cooperatives were in the North Central area, and they had 47 percent of the total membership. However, only 27 percent of the total value of poultry products sold cooperatively were in the North Central area.

Many specialized egg and poultry cooperatives have been organized, but the mortality rate has been high. This was largely because of attempts to pattern after successful associations in heavier commercial sections. In many of these attempts, insufficient consideration was given to basic differences between areas in production and marketing conditions.

The number of existing specialized associations in this area does not tell the entire story, however. Large volumes of poultry products are marketed by other types of cooperatives in the North Central States. A total of 381 cooperatives handled poultry products in that area in 1961-62. These constituted 71 percent of the 535 cooperatives marketing these products.

Such specialized poultry cooperatives as the Cooperative Produce Association, Sioux Center, Iowa; the Farmers Produce Association, Ashby, Minn.; Lake Land Egg Cooperative, Valders, Wis.; Producers Produce Co., Springfield, Mo.; and several of the former auctions in Ohio handle large volumes of eggs.

Among the largest cooperative handlers of eggs in the Nation is the Poultry Producers Association,

Versailles, Ohio, originally an egg and poultry auction-type association. This association handled 713,000 cases of eggs in 1962 and 8.5 million pounds of poultry, mostly fowl. It served nearly 2,000 producers in parts of Ohio, Indiana, and Illinois. Over the years, it has paid its members about \$428,000 in cash patronage refunds.

Several of the Nation's largest turkey cooperatives operate in Minnesota and Iowa.

An additional large volume, especially of eggs and turkeys, is marketed by cooperatives handling other commodities. Among them are Land O' Lakes Creameries, Inc., Minneapolis, Minn.; Hamilton Farm Bureau Cooperative, Inc., Hamilton, Mich.; Indiana Farm Bureau Cooperative Association, Inc., Indianapolis; Boone Valley Cooperative Processing Association, Eagle Grove, Iowa; and the more than 350 cooperative creameries, grain elevators, supply cooperatives, and other local associations.

More than 50 cooperative creameries in the region handle eggs. Land O' Lakes Creameries, Inc., Minneapolis, Minn., in 1962 handled 455,000 cases of eggs and 36 million pounds of turkeys for 1,002 of its 70,000 patrons.

In the North Central States, it is probable that poultry products from the nonspecialized farms will continue to be marketed largely in conjunction with other farm products and the purchasing of farm supplies. Here, as elsewhere, many farms are discontinuing poultry production, and the number of large and specialized flocks is increasing rapidly.

There are a number of federa-

tions of cooperatives in the area marketing poultry products. Federated Egg and Poultry Sales, Inc., Wooster, Ohio, with six member egg and poultry cooperatives in Ohio and one in Michigan, is the only federation set up in the North Central States specifically to serve poultry cooperatives. However, several other federations market poultry products for member associations. Three turkey cooperatives in the North Central region are members of the federated Norbest Turkey Growers Association, Salt Lake City, Utah.

The South

In 1961-62, 16 States located in the South had 23 percent of the specialized egg and poultry cooperatives and the highest net sales of poultry products marketed cooperatively, with 31 percent of the U.S. total. Many of the sales have been broilers, but egg volumes have in-

creased rapidly during recent years.

In 1961-62, 23 specialized and 62 other cooperatives marketed poultry products in 16 of the South Atlantic and South Central States. In 1960-61, Texas had 6 specialized associations in this field and 10 other associations marketed eggs and poultry. Mississippi had 16 associations handling these products; Oklahoma, 12; North Carolina, 11; and Georgia, 10.

Among the leading specialized cooperatives in egg and poultry marketing in the area is the Rockingham Poultry Marketing Cooperative, Inc., Broadway, Va., organized in 1940.

It processes and markets both broilers and turkeys. Its operations are recognized as being outstandingly successful and progressive. It has four processing plants—two in Virginia and one each in West Virginia and North Carolina.

In 1962, it processed 45 million pounds of broilers and 11 million pounds of turkeys ready-to-cook, a large portion of which was exported. This cooperative serves about 1,300 broiler and turkey producers.

In the South, as in the North Central States, large volumes of poultry products are marketed by such nonpoultry cooperatives as the Cotton Producers Association, Atlanta, Ga.; Mississippi Federated Cooperatives (AAL), Jackson;



Selling eggs and poultry by auction became popular in the 1930's when more than 30 egg and poultry auction-type associations were organized. This method is no longer used.

Southern States Cooperative, Richmond, Va.; and Rockingham Cooperative Farm Bureau, Inc., Harrisonburg, Va.

Cotton Producers Association is among the largest integrated broiler handlers in the United States. To serve broiler growers, it operates 9 hatcheries, 2 feed mills, 3 poultry processing plants, and han-

dles about 60 million broilers a year.

In 1962, Mississippi Federated Cooperatives (AAL) marketed 620,000 cases of eggs and 18 million pounds of poultry.

A considerable number of smaller cooperatives, especially in Florida and North Carolina, handle eggs.

Types

BASED upon method of operation or product handled, a number of distinct types of associations serve poultry producers. The most important of these types are discussed briefly in the following pages.

By Method of Operation

Poultry cooperatives market their members' production through pools or auctions, by the commission method or bargaining, or as a sideline.

Pool

In the 1920's the pooling type of association was most successful and therefore received the most consideration. The oldest and largest western associations discussed earlier are of this type. Pool-type associations operate elsewhere but have not been as successful. Notable exceptions to this statement were two early New England associations, the Eastern Connecticut Poultry Producers, Inc., Providence, R.I., organized in 1923, and the Connecticut Poultry Producers, Inc., Mount Carmel, organized in 1924. Both of these associations were merged with Eastern

States Farmers' Exchange, Inc., in 1959.

Auction

An important development in the 1930's, particularly in the Northeastern States, was the organization of small associations, originally selling poultry and eggs by the auction method, in New Jersey, Pennsylvania, Connecticut, New York, Massachusetts, New Hampshire, Ohio, Rhode Island, Illinois, Indiana, and Maryland.

The first of these was formed in New Jersey in 1930. A total of 32 associations of this type were started between 1930 and 1939. None have formed since 1939 and none now operate as auctions, but in 1963, 15 associations were operating that originated as auctions.

The auction served as a first simple stage to more complex pooling and processing operations. Most of the auction associations handled only eggs originally but later added poultry. They usually auctioned eggs twice a week and live poultry once a week—both in small producer lots.

Many auction associations grew rapidly in volume and in area served. The oldest of these, the

Flemington Agricultural Marketing Cooperative Association, Inc., Flemington, N.J., was organized in 1930. In a single year, 1954-55, it served nearly 2,500 members; handled 449,000 cases of eggs, 65,000 crates of live poultry, and 23,000 head of livestock; and did a total business of almost \$8.5 million.

Some of the auctions served areas as small as a single county. Others served producers over most of their respective States. One association, New Hampshire Egg Producers Cooperative, Derry, served parts of New Hampshire, Maine, Vermont, and Massachusetts.

At the time these auction associations filled a need for a new type of cooperative in the commercial or semicommercial producing areas close to the large consuming centers, especially in the Northeast. Because of their local nature, small volume and capital requirements, prompt producer payment, absence of marketing agreements, visible operations, and low operating costs, auctions attracted producers. They enabled their members to obtain better prices for poultry and eggs. Nonmember producers also received better prices as a result of the operation.

To the small buyers, auctions offered quality products close to the large markets. Many buyers who wished graded and high-quality poultry products in small volumes attended their sales.

As volume increased, the auction method of selling became too slow and cumbersome. Many associations abandoned auctions during World War II because of Office of Price Administration price ceilings. Only a few ever again used this method for more than part of

their egg volume. It was later used largely, or only, for price determination and to satisfy certain types of small buyers. At present the remaining former auction associations operate on a pool basis. For some years after discontinuing the sale of live poultry by auction, four associations operated poultry processing plants. Only one, located in Ohio, does so at present.

Commission

The commission method of marketing eggs resembles the auction type closely except that producers' eggs are sold in lots at private sale instead of by auction. Associations using this method perform services similar to those of auctions. Eggs are sized by the producer at his farm. The association inspects and sells them and then pays the producer.

Each producer receives the gross sale price of his eggs, minus a deduction, or commission charge, on each case of eggs. This type of association often evolved when auctions were discontinued. But as volume increased, some associations found it necessary to depart from individual producer lot sales. The weekly or semiweekly pool method followed as the third development. The commission method of operation, however, is no longer common among egg and poultry cooperatives.

Bargaining

The bargaining type of egg cooperative is represented in the East by Quality Egg Club Cooperative Association of New Jersey, Inc., Vineland; Bradco Egg Producers Cooperative, Inc., Towanda, Pa.; Farmingdale New Jersey Cooperative Egg Producers Association,

Inc., Farmingdale; and Federation of Poultry and Egg Producers Cooperative Associations, Inc., Lakewood, N.J.

This type of association merely acts as intermediary between individual producers and receivers in such matters as prices, weights, and quality maintenance. It renders few services; does not physically assemble, handle, sell, or make payment to members; and usually, merely supervises or acts as a bargaining agent in the selling process.

Grading and packing services are performed largely by members. For this reason operating deductions and costs of the association are low. In some instances, receivers pay association costs from their margins rather than the association charging producers for association costs. Obtaining uniformity of product and pack is one of the difficulties of this type of cooperative.

About 12 local egg bargaining associations operate in California and 7 in New Jersey.

Sideline

Many cooperatives now marketing poultry products were not organized primarily for that purpose. They were set up to handle farm supplies; to market dairy products, grain, or livestock; or to render other services. They later assumed egg and poultry handling merely as a supplementary or sideline activity. These associations, irrespective of their individual method of handling eggs and making returns, have been classed as sideline cooperatives.

Prominent in this type is the Egg Marketing Division of Cooperative G.L.F. Exchange, Inc. (now Agway, Inc.) already referred to.

A similar sideline operation is that of Southern States Cooperative, Inc., Richmond, Va. It operates three egg grading stations, one each in Maryland, Virginia, and West Virginia. In 1962-63, it marketed 335,000 cases of eggs for about 400 shippers.

Other representative examples of sideline egg cooperative operations in the East are Rockingham Cooperative Farm Bureau, Inc., Harrisonburg, Va.; United Cooperative Farmers, Inc., Fitchburg, Mass.; Inter-County Farmers' Cooperative Association, Inc., Woodridge, N.Y.; and Central Connecticut Cooperative Farmers Association, Manchester, Conn.

Large quantities of eggs and some poultry are handled by some of these associations. They usually pay the full cash or competitive prices for eggs on an outright purchase basis. Many of these are large farm supply cooperatives. These associations, like private handlers, pay producers the going price; this may vary from the final sales price the associations will obtain.

With the development of contract production and other forms of vertical integration in the poultry field, it is probable that marketing eggs and poultry by cooperatives will be tied in more closely with those handling production supplies—poultry feeds in particular.

By Product Handled

Some cooperatives were organized to market a single product such as turkeys, broilers, and ducks.

Turkeys

About 20 widely scattered cooperatives handle turkeys as their principal product. Ten of these



The Rockingham Poultry Marketing Cooperative, Inc., Broadway, Va., was the first cooperative organized to process and market broilers. Turkeys now make up a large part of this cooperative's business. It has exported large volumes of both broilers and turkeys.

specialized turkey cooperatives are members of Norbest Turkey Growers Association, a sales federation of 11 turkey marketing cooperatives, discussed previously.

Prominent among the turkey cooperatives that are not members of Norbest Turkey Growers Association are Central Cooperative Turkey Producers, Ellsworth, Iowa, and Holbrook Turkey Growers' Cooperative Association, Cheyenne, Colo.

Other commodity cooperatives, such as Land O' Lakes Creameries, Inc., and Western Farmers Association, Inc., Seattle, market tur-

keys in important volumes also, as a sideline activity.

In the East, Rockingham Poultry Marketing Cooperative, Inc., Broadway, Va., is the only large cooperative processor and marketer of turkeys. The volume of turkeys handled by individual turkey cooperatives is as high as 42 million pounds a year with over 20 million pounds a common volume—and usually from less than 200 growers.

Broilers

Despite concentrated production of commercial broilers in several sections of the country as early as 1934, the first cooperative set up to process and market broilers, Rockingham Poultry Marketing Cooperative, Inc., was not organized until 1940. This association handles both broilers and turkeys, operating four plants in 1964.

Only a small number of specialized broiler processing and marketing cooperatives were set up and few of these remain. Among those still operating is the Arkansas Poultry Cooperative, Inc., Bentonville.

A number of farm supply and other cooperatives process and market large volumes of broilers. Among these are Central Carolina Farmers Exchange, Durham, N.C.; Cotton Producers Association, Atlanta, Ga.; and Western Farmers Association, Seattle, Wash.

During 1944 and 1945, four local broiler processing and marketing cooperatives were set up on the Delmarva Peninsula — Delaware and the Eastern Shore of Maryland and Virginia.

Three of these associations established a cooperative federated sales and service agency—the Eastern Poultry Cooperatives, Inc., with original headquarters at Wilming-

ton, Del. Largely because both management and members lacked a cooperative background and experience, the member associations were unable to meet the competition. Therefore, they were short-lived, and the federation ceased to operate.

Ducks

The Long Island Duck Farmers Cooperative, Eastport, N.Y., is now the only specialized U.S. duck growers' cooperative. There had been several duck cooperatives on Long Island and elsewhere earlier. The present association was formed in 1961 after three groups

of Long Island duck growers consolidated. It has facilities for processing, packing, and storing the entire production of its 44 members, who raise about 70 percent of all ducklings produced in the United States.

Hatchery, Hatching Eggs, and Breeders

Over the years a considerable number of specialized cooperative hatcheries were set up. Also, a number of associations to market turkey hatching eggs and poultry breeding associations were organized. By the early 1950's hatching

Long Island Duck Farmers Cooperative, Eastport, N.Y., is the only specialized processing and marketing cooperative for duckling in the United States and handles about 70 percent of this country's total duckling production. The New York Department of Agriculture and Markets has helped in this cooperative's quality and sales promotion programs. John J. Scanlan (left), Farmer Cooperative Service, and Bruce F. Failing, Director of Marketing for the cooperative, discuss merchandising at a demonstration on new ways to cook duckling.





operations were carried on by nearly 100 farmer cooperatives of various types, but most of these have been discontinued.

Many cooperative hatchery operations are now carried on by either farm supply or broiler type marketing associations instead of by cooperatives specializing in hatchery activities.

At present the number is small and confined largely to cooperatives primarily engaged in either handling farm supplies or processing broilers.

Among these are Indiana Farm Bureau Cooperative Association, Inc., Indianapolis; Cotton Producers Association, Atlanta, Ga.; Central Carolina Farmers Exchange, Durham, N.C.; and Southern States Cooperative, Inc., Richmond, Va.

Discontinuance of cooperative effort in the field of hatcheries, hatching eggs, and breeder farms has been due to a number of causes. Among these have been development of advanced strains of poultry by large specialized hybrid breeders and others, satisfactory private sources of chicks and poults, small unit margins, and the need for large sales volumes.

Growth of Federations

FORMATION of federations among the poultry cooperatives for sales and other purposes has been slower than among farm supply and some commodity associations.

This has been due in part to the greater lack of geographic concentration among cooperatives in the poultry field. The separate and noncoordinated operation of the many small associations has been one of the weaknesses in the cooperative marketing of poultry prod-

ucts. However, there are now several federations of egg and poultry cooperatives.

Norbest Turkey Growers Association, a federation of 11 turkey marketing cooperatives, has been discussed previously.

In 1939, seven egg and poultry associations in Ohio formed Federated Egg and Poultry Sales, Inc., Wooster, for joint selling in Cleveland, Columbus, Pittsburgh, and elsewhere. Later, Michigan Farm

Bureau Services, Inc., Jenison, Mich., became a member. In 1962, this federation sold 558,000 cases of eggs and over 15 million pounds of poultry for its 7 member cooperatives, which served over 4,800 egg shippers and 800 poultry shippers.

Four New Jersey associations, operating originally as auctions, formed the New Jersey Poultry and Egg Cooperative Marketing Association, Inc., Flemington, to carton and merchandise a portion of their egg volume.

Before 1952, some 60 egg and poultry marketing cooperatives in the northeastern area operated independently; they had no central cooperative sales or service association to serve them. The result was uncoordinated sales and other efforts. It became apparent that if surplus eggs were handled through a joint sales agency—a federation of cooperatives—the local associations would be less likely to undersell each other and depress prices. Egg prices in terminal markets would be more stable, also, and the average price to producers would tend to be higher.

Therefore, in 1952 a federation, North American Poultry Cooperative Association, Inc., New York, N.Y., was organized as a sales and service agency for its member associations.

Its 23 member associations are chiefly in the Northeastern States, but others are as far west as Minnesota and as far south as Mississippi. Each member association sells a specified quota of eggs through the federation on a regular basis plus whatever occasional surplus it desires.

This federation has become an influential factor in the New York

City egg market and in the Nation's pricing of eggs.

An early federation of broiler cooperatives, Eastern Poultry Cooperatives, Inc., already mentioned, was set up in 1945 to serve the broiler processing cooperatives in the East. It ceased to operate with the discontinuance of the broiler cooperatives on the Delmarva Peninsula.

From a historical viewpoint, organization of Pacific Egg Producers Cooperative, Inc. (PEP), in 1922, to market eggs in the eastern markets for five Pacific coast associations, was an outstanding development in federated cooperative egg marketing.

First in its field, this federated sales association with headquarters in New York City had as its members the following organizations with their former names: Washington Cooperative Farmers Association, Seattle; Oregon Egg Producers, Portland; Poultry Producers of Central California, San Francisco; Poultrymen's Cooperative Association of Southern California, Los Angeles; and San Diego Cooperative Poultry Association, San Diego, Calif.

This sales federation marketed as high as 1.9 million cases of eggs a year. It sold eggs under the famous "PEP" brand. By virtue of the high and uniform quality of its product and its large and dependable volume of white-shelled eggs with light-colored yolks, resulting from controlled feeding on specialized poultry farms, it created a demand which soon brought a premium for its eggs in eastern markets.

An important portion of the eggs were sold at daily auction to help determine selling prices. It

succeeded in reducing the cost of selling eggs in the East from about 60 cents to as low as 12 cents a case.

As a result of curtailed egg production on the Pacific coast, increased local consumption there, and increased production of high-

quality eggs elsewhere—especially in the Northeastern States—the eastern shipments of the member associations decreased substantially after 1938. In 1942, after 20 years of operation, the association became and has remained inactive.

Present Trends

SEVERAL distinct trends are discernible, and changes appear necessary in the cooperatives that market poultry products. The more important follow.

Broadening Services

Specialized cooperatives in the poultry field usually started to market only one product—eggs, turkeys, or broilers. Few associations, except some of the former egg and poultry auctions and the turkey cooperatives, have adhered to such limited, one-commodity operation, however. Instead, most have broadened their bases of operation as to number of products marketed and handling production supplies and have gone further in processing operations.

Western Farmers Association, Seattle, Wash., for example, starting as an egg marketing association, later marketed fowl, dried and frozen eggs, fryers, turkeys, canned poultry, turkey roasts and rolls, grain, seeds, and several other farm products and handled feeds, fertilizers, and other farm production supplies.

Intermountain Farmers Association, Salt Lake City, Utah, originally rendered the single service of marketing eggs. Later it took on marketing fowl, turkeys, and broilers, handling poultry and other

farm supplies, and manufacturing and selling poultry and livestock feeds.

Integrating Operations

In addition to performing a number of marketing services, egg and poultry marketing cooperatives are finding it necessary to render both production and marketing services. They are discovering that such services must be performed more in relation to each other rather than as distinct and unrelated services. Those rendered may be under contractual arrangements with members within an association, or they may be the joint performance of related services between or among cooperatives, or others, who serve poultry producers.

While the marketing of products by producers through their own agencies is in itself an old form of vertical integration, it was not as closely related to the several aspects of production as it will need to be in the future.

Consolidating and Merging

There have been an increasing number of unifications, or attempts at it, by cooperatives in the poultry field. Consolidations and mergers are expected to continue among both small and large egg and poul-

try marketing cooperatives and with farm supply cooperatives in an effort to increase their operating efficiency and selling effectiveness.

Among earlier unifications was the merger in New England and Pennsylvania with Eastern States Farmers Exchange, Inc. (now Ag-way) of seven local egg marketing cooperatives. Another merger was that of Southern Minnesota Turkey Growers Association, Madelia, with Faribo Turkeys, Inc., Faribault, Minnesota. Examples of recent consolidations are the formation in California of Pacific Growers, San Leandro, Calif., by Nulaid Farms, San Leandro, and Hayward Poultry Producers Association, Hayward, Calif., and the merger of two organizations in Draper, Utah, with Intermountain Farmers Association, Salt Lake City.

Coordinating Efforts

Closer coordination of effort among some local cooperatives, directed especially at more effective marketing, has been developing. Examples of this trend are the formation of Federated Egg and Poultry Sales, Inc., Wooster, Ohio, and North American Poultry Cooperative Association, Inc., New York City. Another example is the coordinated cartoning and selling of eggs by four New Jersey cooperatives. And a fourth example is Norbest Turkey Growers' marketing turkeys in many large domestic markets and exporting large volumes to Europe and several other foreign countries for its 11 member associations.

There are indications that several additional federations will be organized in the several regions to serve egg and poultry marketing cooperatives.

Attracting Large Producers

In the past most egg cooperatives served the small farm-flock type producer and had the small sideline producers as the bulk of their members. With the decrease in number of small flocks and the increase in number of large, specialized egg producing units, the chief suppliers of eggs to the cooperatives in the future will be a small number of large, commercial, specialized producers. Cooperatives need to take steps to attract these producers. As the number of large producers now selling directly to consumers

To capture additional marketing margins, cooperatives are more and more going into further processing of members' products. Western Farmers Association, Seattle, Wash., has developed many new poultry products.



and retailers increases and the number of outlets decreases, many of these producers will find it advisable to join or form marketing cooperatives.

Increasing Efficiency

Competition has required leaders of poultry cooperatives to become increasingly cost and efficiency conscious and to rely less upon the cooperative producer's loyalty.

Accordingly, they have found it necessary to be more keenly interested in lowering costs by increasing and leveling receipts; serving the larger producers; procuring higher quality products; and using a larger amount of modern labor-saving plant and office equipment, better plant layout, short-cut methods, employee incentives, improved materials-handling techniques, and other modern practices and devices.

Special Crops Cooperatives

by Clyde B. Markeson, Chief
and Bruce L. Swanson
Special Crops Branch

MARKETING cooperatives handling tobacco, dry beans, dry peas, rice, sugarcane, sugarbeets, honey, forest products, and seed make up most of the special crops group.

Volume handled by the special crops cooperatives has increased

over the years, and the rather complete services performed by some of the associations represent significant developments in farmer co-operation.

In 1962, some 430 cooperatives handled special crops valued at about \$867 million.

Tobacco

IN 1961, United States tobacco growers produced over 2¼ billion pounds of tobacco valued at \$1.3 billion.

Tobacco is grown in some 20 States extending from Massachusetts to Florida, and as far west as Minnesota and Missouri. The combined production of North Carolina, Kentucky, Virginia, South Carolina, and Tennessee usually comprises about 85 percent

of the total United States crop.

One or more cooperatives operate in most major tobacco producing areas. These associations perform a variety of services for patrons including receiving, displaying, and marketing tobacco. Additional functions may include processing and storing, advising growers on harvesting and handling practices best adapted to their needs, and handling farm ma-

chinery, equipment, and supplies.

In addition to performing one or more of the above services, some cooperatives also assist the Federal Government in administering the tobacco price support program.

Other cooperatives were organized for the sole purpose of handling a specific type of tobacco moving under loan. Activities performed in relation to the price support program include processing, storing, and selling loan tobacco.

In 1962 a total of 31 associations handled over \$200 million worth of tobacco. Fifteen cooperatives operated looseleaf auction warehouses, one operated a hogshead closed-bid facility, and six handled cigar leaf.

Nine associations were involved in administering the price support program, either on an exclusive basis or in conjunction with other marketing activities. Three additional associations, located in Puerto Rico, marketed cigar leaf.

Price Supports for Tobacco

The price support program for tobacco is designed to assist growers in obtaining a fair price for their crop. In effect, the Federal Government establishes a floor under prices by means of the support activity.

Price support for tobacco growers who are members of a cooperative is carried out under a loan program administered through grower cooperatives under contract with the Commodity Credit Corporation (CCC). The latter is a Government-owned corporation supervised by a board of seven directors, of which the Secretary of Agriculture is chairman.

The Commodity Credit Corporation makes loans to tobacco cooperatives responsible for stabilization activities. These, in turn, reimburse privately or cooperatively owned or other types of marketing organizations for making advance payments to growers for tobacco moving under loan.

Services performed by stabilization associations include receiving, redrying, packing, storing, and marketing tobacco consigned to them under the price support program. These associations enter into contracts with redriers, storage warehouses, and others to perform the services the cooperatives do not provide.

Before the opening of the tobacco marketing season each year, the U.S. Department of Agriculture, through the Commodity Credit Corporation, submits a contract to each stabilization association for its respective officers to sign. This contract sets forth in detail relations between CCC and the association incident to loan operations. The contract provides that the association shall receive tobacco from growers; that it will be processed, stored, and marketed by the association; that CCC will make non-recourse loans to the association for advances necessary to reimburse growers and for handling and operating costs pending sale of such tobacco; and that sales proceeds from the tobacco will be applied toward repayment of the loans.

Early Associations

Tobacco growers were among the first agricultural producers to undertake cooperative marketing of their crop on a large scale. Attempts were made to sell tobacco

cooperatively in Connecticut as far back as 1862. In 1873, growers in Kentucky and Massachusetts built cooperative warehouses in which they stored their tobacco while waiting for better prices. Later came packing associations, sales agencies, and local pools.

Operation of local farmer-owned warehouses and packing plants for tobacco began in Wisconsin about 1902. More than 20 associations were organized later in Kentucky, Tennessee, Maryland, Virginia, North Carolina, Massachusetts, Ohio, Pennsylvania, and Connecticut. They tried by various methods to obtain higher prices for their growers' tobacco.

During World War I and immediately thereafter, attractive tobacco prices encouraged increased production. For example, the average price received by farmers for their tobacco increased from 14.8 cents a pound in 1914 to 31.2 cents a pound in 1919. However, prices declined drastically during the following year and farmers received an average price of 17.2 cents for their 1920 crop.

Such conditions led to the formation of several large tobacco marketing cooperatives during the period 1920-23. Of these early organizations, only the Burley Tobacco Growers Cooperative Association, Lexington, Ky., succeeded in establishing itself on a permanent basis. A few associations were organized during the 1930's and several have been formed since World War II.

Existing associations, classified by primary type of tobacco handled, are briefly described in the following sections.

Light Air-Cured Tobacco (Maryland)

Maryland tobacco comprised about 1.7 percent of the total United States tobacco crop in 1962. It is used principally in cigarette blends and is noted for its fine burning quality.

Maryland Tobacco Growers Association, Baltimore, Md., is the oldest tobacco cooperative now in existence. Organized in 1906, the association has functioned as a marketing organization since 1920. It handles Maryland tobacco exclusively and sells crops of individual growers on an agency basis.

The association operates on the closed-bid, packed-tobacco auction market at Baltimore. Although the majority of sales are made during the competitive bidding season, some are also made at other times during the year on a negotiated basis.

This cooperative has for several years handled about 95 percent of the tobacco sold on the Baltimore market and approximately 15 percent of the State's total tobacco crop.

The association had a membership of some 4,200 producers in 1962. During that year it sold over \$3.9 million worth of tobacco for 6,200 patrons.

The association also purchases farm supplies for its members including feed, seed, fertilizer, farm machinery and equipment, and hardware and building materials.

Maryland Tobacco Cooperative, Inc., organized in 1949, is a stabilization cooperative with headquarters at Upper Marlboro. It was formed to help growers of Maryland tobacco obtain government loans on their crop. Such



Tobacco growers in Kentucky were among the first to sell tobacco cooperatively.

loans are made available to growers in the several producing areas following a favorable vote in a referendum concerning production controls.

In the referendum held in February 1960, quotas were approved by growers for the 1960, 1961, and 1962 crops. The association received 1962-crop tobacco valued at almost \$2.5 million under the support program. This tobacco was furnished by some 10,000 patrons, all of whom were required to be members of the association.

Light Air-Cured Tobacco (Burley)

Burley tobacco primarily grown in Kentucky, Tennessee, Virginia, West Virginia, Ohio, Indiana, and Missouri represented 28 percent of the total United States tobacco

crop in 1962. The bulk of this type tobacco is used in cigarettes, with a small amount being used for smoking and chewing tobacco products.

Burley Tobacco Growers Cooperative Association, located at Lexington, Ky., is one of the largest and most successful tobacco marketing operations. It was organized in 1920. It handled about 1 billion pounds of tobacco from 1921 to the end of its 5-year grower contract which terminated with the 1925 crop. As a result of delay in selling the 1923, 1924, and 1925 crops, an insufficient number of growers signed new contracts, and the association ceased active operation with the 1925 crop. It maintained its corporate structure, however.

During the 1940 and 1941 seasons and continuously since the 1945-46 season, this association has

handled tobacco under the Federal Government's program. It operates essentially the same as other tobacco cooperatives in carrying out the price-support program. It arranges for receiving, processing, storing, and marketing loan tobacco. The organization had almost 500,000 members in 1962. During that year it received over \$27 million of tobacco from some 12,000 member-patrons.

Central District Warehousing Corporation, Lexington, Ky., was originally created as a subsidiary of the Burley Tobacco Growers Cooperative Association. It now functions independently, although it has continued to store hogshead tobacco for the Burley Association. Central District began auction selling in 1926. The corporation was reorganized in 1945 to conform to State and Federal cooperative laws.

The association owns 16 ware-

A tobacco auction sale in process. Auctioneer and buyers proceed down the row as the tobacco is sold.



houses located in 3 local tobacco markets in Kentucky. These warehouses handled some \$12 million worth of tobacco for 9,200 growers during the 1961-62 marketing season.

Auction warehouses operated by this association and by others noted in succeeding sections furnish a place where growers may deliver their tobacco and have it auctioned off to the highest bidder.

When the market season opens, the grower delivers his tobacco to the auction warehouse. Here it is weighed and placed on baskets. A ticket is placed on each lot showing its weight and the name of the grower. The baskets are then arranged in rows on the warehouse floor in preparation for sale.

After the auction sale has been made the grower may (1) accept the bid and receive payment that day, (2) refuse the bid and have his tobacco offered at a subsequent auction sale or, (3) consign it to an association that is administering the tobacco price support program for the Federal Government and obtain a loan on it.

If the tobacco is consigned to a stabilization cooperative, it is immediately turned over to a redryer, where excess moisture is removed before the tobacco is stored pending sale.

Western District Warehousing Corporation, with headquarters at Shelbyville, Ky., originated in the 1920's in a manner similar to Central District Warehousing Corporation. The association began auction sales in 1926. In 1948, the corporation was reorganized to comply with cooperative laws.

The cooperative owns and operates eight auction warehouses, located in six local tobacco mar-

kets in Kentucky. It conducts redrying, packing, and storage operations through separate corporations that lease facilities from it. Facilities include a redryer at Shelbyville, Ky., and a total storage capacity of some 50 million pounds of tobacco at Shelbyville and Camp Taylor, Ky.

The association has some 10,000 members. Some 7,500 members and 2,000 nonmember patrons furnished tobacco to be auctioned during the 1961-62 marketing season, resulting in sales of over \$16 million. Western District sells approximately one-fifth of all tobacco sold on the markets in which it operates.

Other cooperatives in addition to centralized auction cooperatives, such as Central District and Western District—handle burley tobacco. Many are local auction warehouse associations. These locals operate one or more warehouses in a single local market. Central associations, on the other hand, operate in more than one local market and have a headquarters to coordinate and control administrative and operating functions.

Two locals in Kentucky handle burley tobacco. In total, they served some 5,600 members and handled over \$3.5 million worth of 1962 crop tobacco.

Five locals in Tennessee handle burley tobacco. Taken as a group, they comprise more than 17,000 members and annually handle tobacco valued at over \$7.5 million.

Other associations handling burley tobacco under the Government's tobacco price-support program are the Virginia Burley Tobacco Growers Association, Abingdon, and the Burley Stabilization Corporation, Knoxville, Tenn.

The Virginia association handled over \$850,000 worth of 1962 loan tobacco for 3,300 patrons. The organization has a standing membership of some 13,000 producers. Burley Stabilization Corporation has over 90,000 members and handled 1962 loan tobacco valued at \$4.1 million for 19,000 patrons.

Flue-Cured Tobacco

More flue-cured tobacco is produced than any other type grown in the United States. Produced in North Carolina, South Carolina, Virginia, Georgia, and Florida, this type comprises about 60 percent of all tobacco annually grown in this country. It is used principally in the manufacture of cigarettes.

Flue-Cured Tobacco Cooperative Stabilization Corporation, with headquarters at Raleigh, N.C., was organized in 1946 and began operations with that year's crop. It handles a larger volume of tobacco than any other association, and is perhaps the largest cooperative in the world from the standpoint of number of members. It handled in excess of \$95 million worth of tobacco during the 1961-62 marketing year.

The association currently has over 600,000 members whom it assists in obtaining loans under the tobacco price-support program. This cooperative takes the tobacco consigned to it under the loan program, has it redried and stored, and then sells it as opportunity offers. Redrying, storing, and related services are performed for the association under contract.

During the period 1946-62, Flue-Cured Tobacco Cooperative Stabilization Corporation handled over 2.4 billion pounds of tobacco.

Sales for members during this period amounted to over 1.9 billion pounds. This corporation lent some \$1 billion to members for their tobacco moving under price support, and distributed over \$17 million in net gains, as of the end of 1962.

The territory served by this organization is divided into districts, with a director elected from each district. Directors must be tobacco growers, and they serve a 3-year term.

Flue-Cured Tobacco Auction Warehouse Associations, three in number and all locals located in North Carolina, operate auction warehouses to market flue-cured tobacco. Together, they handled over \$12 million worth of tobacco during the 1961-62 season for some 5,000 patrons, of whom about 70 percent were member-patrons.

Auction warehouses operated by these associations are among the largest of those operated by any tobacco cooperative, and the volume handled has resulted in increased efficiency and strengthened the marketing position of these organizations.

Dark Tobaccos

The dark tobaccos consist of fire-cured and dark air-cured types. Production of both types is concentrated in the States of Virginia, Kentucky, and Tennessee.

Dark Fire-Cured Tobacco Associations, four in number—are: Eastern Dark-Fired Tobacco Growers Association, Springfield, Tenn.; Western Dark-Fired Tobacco Growers Association, Murray, Ky.; Virginia Dark-Fired Tobacco Growers Marketing Association, Inc., and its independently operat-

ed subsidiary, Dark Tobacco Sales Cooperative, both at Farmville, Va.

The first two associations were organized in 1932 and began marketing operations with the 1931 crop. The 1932 crop was the first handled by the Virginia association. Beginning with the 1953 crop, that portion of Virginia's dark-fired tobacco crop placed under Government loan was consigned to the Dark Tobacco Sales Cooperative.

Marketing activities of these associations are essentially the same. Each owns one or more warehouses for handling, storing, and selling tobacco. Marketing agreements, when used, are quite flexible. Members are permitted to sell their tobacco at the farm, if they so desire.

Growers are encouraged, however, to offer their tobacco for sale over the auction floor, where bidding for their crops is competitive. If the bid at the auction is not acceptable, the grower may reject it and turn the tobacco over to the association. He will then receive an advance under the Government's loan program.

Each association processes and stores its members' tobacco and offers it for sale to the trade. Receipts from sale of the tobacco, above the loan advance and handling costs, are paid to the growers in the form of patronage dividends.

That portion of the crop delivered to the association for sale is pooled and, therefore, individual lots lose their identity. The grower receives an advance on the pooled tobacco before it is sold and final payment when all tobacco in the pool has been sold.



This is a salesroom of the Flue-Cured Tobacco Cooperative Stabilization Corporation, Raleigh, N.C. The association currently has over 600,000 members it assists in obtaining loans under the price-support program.

Western Dark-Fired Tobacco Growers Association had over 13,000 members in 1962. The association handled more than \$5 million worth of tobacco for about 10,000 member-patrons during that year. Tobacco valued at almost \$114 million was placed under Government loan. The cooperative serves two markets and operates a redrying plant and storage warehouses in addition to its auction facilities. Members in 11 counties annually furnish about 15 million pounds of tobacco for sale.

Eastern Dark-Fired Tobacco Growers Association had 33,000 members in 1962. Approximately 10 percent of the membership patronized the association's facilities to market that year's crop, placing \$3 million worth of tobacco under loan.

This association operates regional pools through subsidiary regional pool warehousing corporations. Local settlement offices are also maintained to settle directly with growers.

Virginia Dark-Fired Tobacco Growers Marketing Association, Inc., is a centralized cooperative operating in three local tobacco markets. It operates four auction warehouses in these markets and has a storage warehouse located in one additional market. Over 8,000 members belonged to the association in 1962. Over 4,000 growers patronized this association, of whom over 60 percent were member-patrons. Tobacco worth \$2 million was handled during the 1961-62 marketing season. Redrying facilities and most storage space are furnished by contract agencies.

Dark-Tobacco Sales Cooperative, a subsidiary of the association just mentioned, handled over \$400,000 worth of loan tobacco for some 3,300 patrons during the 1961-62 marketing season.

Dark Air-Cured Tobacco Associations—totaling three—are: Farmers Cooperative, Inc., Madi-

sonville, Ky.; Stemming District Tobacco Association, Inc., Henderson, Ky.; and Sun-Cured Tobacco Marketing Cooperative, Inc., Farmville, Va. The latter two associations handle tobacco under the price-support program, in addition to their other activities.

Together, the 3 associations have a membership consisting of some 16,000 growers. Some 13,000 growers patronized facilities operated by the associations during the 1961-62 marketing season. Over \$1.4 million worth of tobacco was handled by the three cooperatives during this period.

The problems of associations handling types of dark tobacco are not confined solely to marketing and distributing, but include such matters as crop diversification. Because of declining demand for dark tobaccos, the cooperatives are interested in helping their grower-members make a transition into production of other types of tobacco or into other types of agriculture.

At the same time, the associations support promotion of export markets in order to stabilize demand as much as possible. For example, in July 1962, Virginia Dark-Fired and Sun-Cured Tobacco Export Association, Inc., Farmville, Va., was organized to develop and improve export markets for these types. This association consists of dealers, warehousemen, and tobacco associations.

Cigar Tobaccos

Cigar leaf types are all air-cured, and are classified according to the principal usage of the tobacco: Filler, binder, or wrapper. However, all are used to some extent for other purposes. Wrapper is produced in Connecticut, Massachusetts, Georgia, and Florida; binder in Connecticut, Massachusetts, and Wisconsin; and filler in Pennsylvania, Ohio, and Puerto Rico.

Northern Wisconsin Cooperative Tobacco Pool, which handles cigar tobacco, is the second oldest tobacco cooperative in the United States. Organized in 1922, this cooperative began operating with that year's tobacco crop. Headquarters were at Madison, but are now located at Viroqua, in the center of the area producing the type of tobacco handled by the association.

This association has functioned continuously since being organized. It handles tobacco for members only. In 1962, the association handled \$1.4 million worth of tobacco for 1,800 member-patrons. Tobacco valued at more than \$1 million was placed under loan.

Other cigar tobacco cooperatives, seven in number, handled over \$5 million worth of tobacco for some 800 patrons during the 1961-62 marketing season. Some of these handle loan tobacco, either exclusively or with other tobacco marketing activities.

Rice

THE principal regions devoted to rice production are the Gulf Coastal Plain, in southwestern

Louisiana, and southeastern Texas; a strip of land some 50 miles wide and 150 miles long in east-central

Arkansas; the Central Valley of California; and near Greenville in west-central Mississippi. Grower cooperatives have operated for many years in all of these regions except west-central Mississippi.

The cooperative effort of Mississippi rice growers has gained momentum during recent years, however, and their association is now selling a larger percentage of rice grown in the State. The Mississippi Rice Growers Association, Cleveland, handled rice having a sale value above \$2 million during 1961-62.

In 1962, a total of 61 cooperatives marketed rice with a net value of \$177.7 million for more than 13,500 growers.

Associations handling rice are more diversified than most farmer cooperatives. Their services include purchasing seed rice, farm machinery, and fertilizer for producers; furnishing irrigation facilities and credit to produce the crop; operating rice dryers to remove excess moisture before storing; storing, operating mills for processing the rice for consumers,

and moving the rice into trade channels.

No cooperative performs all these services, since growers' preferences are not the same in all rice-growing areas. The growers themselves, in each area, determine which services they will undertake cooperatively.

Early Rice Cooperatives

Cooperation among United States ricegrowers began first in Louisiana in the 1890's. The first regional rice cooperative was organized in 1910 and had members in Louisiana, Texas, and Arkansas. It maintained local offices, each with a sales manager in charge, throughout the rice areas of those three States. It was reported that the association's membership represented from 60 to 75 percent of the ricegrowers located in those States.

Although the association's services generally satisfied the growers, it ceased operation in 1920. Its failure was reportedly due to a drastic decline in prices, the result-

Modern combines quickly harvest this rice field near Lake Charles, La.





Grain cooperatives with facilities such as these that handle and store both rice and soybeans and use regional cooperatives for processing and marketing have reduced warehousing and distribution costs for growers. "Riceland" is the trade name that can be used for rice produced by members of Arkansas Rice Growers Cooperative Association, Stuttgart, Ark.

ing inability to sell members' rice, and to mistakes in judgment.

Current Rice Cooperatives

American Rice Growers' Cooperative Association is the successor to early cooperative efforts in Louisiana and Texas. Organized in 1921, it has headquarters at Lake Charles, La.

A federated type of cooperative, this association's membership comprises "cooperative marketing and purchasing associations or any corporation engaged in the production of rice." Individual ricegrowers are members of the several local associations.

The central office of American Rice Growers' Cooperative Association is a coordinating and super-

visory office. It makes regular reports to local managers and members on sales at principal points, stocks at various locations throughout the year, market conditions and prices in this country and abroad, receipts and distribution at various markets, crop conditions and related information.

Various units through which the association's operations are carried on include: (1) the 18 member-locals, which handle rough rice marketing operations; (2) cooperatively owned warehouses for storing rough rice; (3) an irrigation company; (4) one or more rice dryers owned and operated by each of the 18 member associations; and (5) a farm supply organization. Rough rice grading laboratories

are maintained by the association at Beaumont and Eagle Lake, Tex.

About 15 percent of the association's marketing business originates in Louisiana, and 85 percent in Texas. The association sold more than \$27 million worth of rough rice in 1962.

The Arkansas Rice Growers Cooperative Association, Stuttgart, Ark., owned and operated the first cooperative rice mill in the United States. Organized in 1921, it initially operated as a rough-rice marketing cooperative. It continues to sell rough rice when volume handled exceeds milling capacity, but its major volume since 1926 has been milled rice. Its total milling capacity at present exceeds 1,250 barrels an hour.

In the early 1920's, before undertaking the operation of its own mill, Arkansas Rice Growers entered into an arrangement with a rice-milling concern for milling its members' rice, with the association handling the sales. Because this arrangement was not entirely satisfactory, the association bought these milling properties in the fall of 1926.

The association pays growers the net amount received for their rice, less freight, insurance, interest, and amounts necessary for operations.

Arkansas Rice Growers markets only rice grown in Arkansas, and under its articles of incorporation it may handle only the rice produced by growers who sign a standard marketing agreement. Almost 5,000 grower-members belong to the organization, and about 3,750 of them patronize the association annually.

Arkansas Rice Growers' services for its members include drying, storing, milling, advertising, and

marketing. To perform the processing operation, the association owns and operates modern rice mills at Stuttgart and Jonesboro, Ark. Rice dryers at several locations in the rice producing areas of the State are jointly owned by the producers at various locations and by Arkansas Rice Growers.

Volume handled by the Arkansas Rice Growers Cooperative Association has increased substantially during recent years. From 1957 to 1962, for example, volume increased from \$30 million to \$42 million—a 40-percent increase.

The association sells a large quantity of its growers' rice in consumer packages under its brand name, "Riceland." The expanding package-rice sales program has necessitated enlarged facilities for packaging operations and storing packed rice. Rice byproducts are also sold in substantial amounts, under the brand names: "Riceland Bran," "Riceland Polish," and "Riceland Hulls."

Rice Growers Association of California, Sacramento, organized in 1921, succeeded the first rice cooperative in that State, Pacific Rice Growers Association, organized in 1915.

Before 1925, Rice Growers Association of California handled rough rice only and commercial mills were their principal buyers. From 1925 to 1930, it milled an average of 100,000 bags of rice annually on a toll basis. During a portion of this time, it operated a mill under a lease arrangement.

In 1930, the association acquired milling facilities for processing members' rough rice and established distributive outlets for the association's clean rice.

This association's membership

comprises a large number of rice-growers located in the principal producing areas of California. Under the terms of the marketing agreement, title to all rice produced by a member is vested in the association and this rice must be delivered to the association upon harvesting. The contract remains in effect from year to year, unless terminated through written notice by either the association or the member at a certain prescribed period each year.

Upon delivery of paddy rice, either by actual physical delivery to the mill or warehouse receipt issued by a bonded warehouse, the grower-member receives an initial cash advance consistent with general market conditions. The association makes additional advances in the form of periodic progress payments throughout the year. Final settlement of each year's pool gives the participating member his pro rata share of the proceeds minus cash advances and minus his share of the costs and expenses.

To enable it to more efficiently handle its members' increased production, the association has considerably enlarged its operating facilities by constructing more bulk storage bins and acquiring additional buildings and equipment.

Rice Growers Association of California presently has a membership of some 1,600 growers. All patrons are required to be members. The association handled almost \$48 million worth of rice furnished by some 1,450 members during the 1961-62 marketing season. Membership voting rights are established on the basis of 1 vote for each 100 hundredweight of rough rice delivered during the preceding crop year.

This cooperative recently completed the first bulk milled rice transportation and processing system in the industry. By shipping milled rice in bulk to Puerto Rico, the association can eliminate the increasingly expensive method of shipping rice in 100-pound burlap bags.

Among the larger rice milling associations organized in recent years are Blue Ribbon Rice Mills, Inc., Houston, Tex.; Farmers' Rice Growers Cooperative, San Francisco, Calif.; and Producers Rice Mill, Inc., Stuttgart, Ark. These associations handled rice valued at more than \$41 million for some 1,700 patrons during the 1961-62 marketing year.

One of the most significant developments affecting ricegrowers during recent years has been the change to bulk handling of rice. This includes (1) using the combine in harvesting the crop, (2) removing excess moisture from the harvested product by artificial means, and (3) storing rice in bulk instead of in bags.

All rice milling and marketing cooperatives in this country own and operate extensive artificial drying and bulk storage facilities for handling members' rice. Addition of drying services has proved beneficial to their members and also in the cooperatives' milling operations. When damp or unevenly dried rice is milled, a large number of the grains break. This reduces the growers' returns, since the percentage of whole grain rice in a given lot determines its market value. Strictly controlled drying closely coordinated with the milling operation enables the cooperatives to market high-quality rice.

In addition to dryers affiliated with the cooperative mills, several

cooperative dryers operate independently. Although drying rice artificially is not new, the extreme

shortage of labor during World War II years gave added impetus to this method of handling.

Dry Beans and Peas

MARKETING and processing cooperatives have an important place in distributing this country's dry bean and pea crops.

Dry Beans

Operating in each of the principal bean-producing States, cooperatives handle about 20 percent of the total production each year and represent over 10,000 producers.

Six States normally produce nearly 90 percent of the total dry bean crop. In the 10 years ended with 1960, Michigan accounted for 27 percent of the average annual U.S. crop; California, 24 percent; Idaho, 14 percent; Colorado, 10 percent; New York, 7 percent; and Nebraska, 6 percent.

States producing dry beans commercially usually specialize in growing particular varieties. California produces practically all the dry limas, Michigan produces the major portion of pea beans, Colorado produces almost half the pintos, Nebraska and Idaho are principal sources of great northern, and New York produces the majority of red kidney beans.

California Lima Bean Growers Association, Oxnard, organized in 1916, is the oldest dry bean cooperative in the United States. It is a federated cooperative with a membership of 11 local associations that served more than 800 producers in 1962. In the first year of opera-

tion, the association handled more than 250,000 bags of standard limas; its total volume is now some three-fourths of a million bags annually. For the year ended September 30, 1962, the cooperative handled a volume valued at almost \$6.5 million.

The major portion of the association's volume consists of large or regular limas. About 20 percent of its annual volume is baby limas. It also handles substantial quanti-

Dry beans were first sold regionally on a trial basis through Farmers Grain and Bean Association, Denver, Colo. This was one of its early plants.



ties of blackeyes, small whites, and pinks each year.

California Lima Bean Growers acts as a sales agency and all warehousing, cleaning, grading, handling, packaging, and shipping are under the direct supervision of the association's inspectors. Beans are handled on a pool basis.

The cooperative sells through food brokers in about 125 principal distributing centers in the United States and Canada.

Initially the association sold all beans in 100-pound bags. In recent years, an increasing quantity has been sold in consumer-size packages. The cooperative carries on packaging operations in its modern packaging plant. Beans received, stored, and packaged at the plant are never touched by hand.

The cooperative sells a substantial volume of its large limas as a canned product. The association does not own any canneries, having its beans canned under contractual arrangement. The canneries are located in different parts of the United States and Canada. Having chosen its canneries with great care in the first instance, the cooperative further insures high-quality pack by requiring canneries to strictly adhere to its specifications in the canning operation.

The association sells its large limas, packed in cans or consumer-size packages, under its brand name "Seaside," adopted many years ago. More recently the cooperative established the brand name "Westside" for its baby limas and blackeyes, and the brand name "Jarron" for its complete line of packaged beans.

Michigan Elevator Exchange, organized in 1921, has its headquarters at Lansing. Its first

members were 45 local cooperative elevators, which invested a total of \$16,000 to provide a central grain, hay, and bean cooperative marketing agency.

The Exchange today consists of over 100 member cooperatives in Michigan operating local elevators. It handles large quantities of dry edible beans, wheat, corn, oats, rye, barley, and soybeans.

The Exchange operates bean processing facilities at Port Huron and Marysville, Mich. At these plants beans are received by truck and carload, photoelectrically sorted, polished, and dried if necessary, and stored if not immediately sold. While most of the beans are shipped to the canning industry in 100-pound burlap bags, an increasing percentage go to the grocery trade in consumer-size polyethylene bags.

The Exchange is a member of American Bean and Pea Growers, Inc., which packs all varieties of beans, peas, and lentils in consumer packages under the "Casserole" brand.

In 1950, the Exchange embarked on an expansion program to increase and improve its handling and processing facilities. In three stages, it constructed a 4-million bushel grain terminal elevator near Ottawa Lake and in 1955 completed the addition of an automatic car dumper and expanded drying facilities.

The Exchange purchased a 2-story frame building in Port Huron to provide necessary space for expansion of consumer packaging operations. It also purchased a 10-silo storage unit with 350,000-bushel capacity at Marysville near Port Huron to serve for bulk storage of both beans and wheat.

Michigan Elevator Exchange is one of five regional grain marketing cooperatives represented by Mid-States Terminals, Inc. This cooperative, formed in 1958 and located in Toledo, Ohio, now has a storage capacity exceeding 2 million bushels for grain and soybeans.

The Exchange is also represented by Producers Export Company, an organization formed by 19 regional grain marketing cooperatives. Based in New York City, it promotes the sale of grain and soybeans in foreign countries for U.S. farmers.

Through a merger in November 1962, the Exchange became the Michigan Elevator Exchange Division of Farm Bureau Services, Inc.

Under the supervision of the Exchange Division, construction of a 2-million-bushel structure began in June 1963 and is now completed. Composed of a grain and bean terminal, elevator, warehouse, and feed mill, the facility is located in Saginaw, Mich. It can be reached by rail, water, and truck and will be supplied with the latest high-speed equipment to facilitate rapid handling.

Michigan Cooperative Bean Marketing Association, Lansing, organized in 1954, began operating as a navy bean pool, naming the Michigan Elevator Exchange as its primary agent. Grower-members deliver beans to country elevators, which have been designated as secondary agents of the marketing association.

The elevator receives the beans, determines the weight and grade, and issues a check for the advance to each member. This advance closely approximates the support price at the time of delivery.

Negotiable warehouse storage receipts issued by the secondary agents are sent to the Michigan Elevator Exchange, which in turn uses them to obtain a loan from the Commodity Credit Corporation (CCC) to reimburse the association for advances made to members.

Charges and rates paid to the elevators for pooling beans are stated in the contract between the primary agent and the secondary agent. After all pool beans have been sold, or taken over by CCC, the grower is paid his final settlement. The amount of this final settlement is based on the average price received for that crop year and upon the quality and grade of beans delivered by the producer.

The association's administrative cost is prorated among all producer members.

Other Dry Bean Cooperatives market large volumes of this commodity. They include Agway, Inc., Syracuse, N.Y.; Wyoming Pure Seed Growers, Worland, Wyo.; Bean Growers Warehouse Association, Twin Falls, Idaho; Big Horn Cooperative Marketing Association, Basin, Wyo.; and Stockton District Kidney Bean Association, Linden, Calif. Each of these associations handles a substantial quantity of dry beans for producers each year.

Outwest Bean, Inc., Denver, Colo., is a joint sales agency established by dry-bean marketing cooperatives in Colorado, Idaho, Wyoming, and Montana, who first organized Western States Bean Cooperative in 1947. The name was later changed to Outwest Bean, Inc.

This association functions as a joint sales agency for 12 patron

cooperatives, 7 of them members. During the 1961-62 season, over \$4 million worth of beans were handled. The cooperative markets members' dry beans in 100-pound bags and in consumer-size packages. In 1953, it bought a warehouse in Denver to store and package dry beans.

Whether its beans are sold in bulk or in consumer packages, the cooperative markets them under its brand name "Outwest." The selling function includes: Storing limited quantities of beans in Denver to expedite mixed-car shipments, carrying spot stocks at a few important markets to permit prompt filling of orders, and keeping member associations abreast of market conditions.

Dry Peas

Washington and Idaho produce almost 90 percent of the dry edible peas grown in this country each year. Some half dozen cooperatives in the two States sell a substantial volume of dry edible peas each year, along with grain and other farm products.

Inland Empire Pea Growers Association, Spokane, Wash., is one of the successful cooperatives handling dry peas. Organized in 1940, it provides marketing services for over 800 members' peas, beans, lentils, and grain. Dry peas constitute a large percent of the total volume handled each year.

The association markets its members' dry peas under a pool system with a marketing agreement. It also markets grain on the conventional buy-and-sell system, with any savings distributed to the producer.

Inland Empire Pea Growers has a seed-improvement program. It

supplies seed—most of it produced by its own members but some bought from other sources. The seed is distributed to producers on a pound-for-pound return basis plus a charge to cover costs of seed improvement, cleaning, and treating.

To more effectively serve its membership, this cooperative maintains elevators at 8 locations in its area of operation but actually receives peas and lentils in a total of some 25 locations.

The association sells dry peas in bulk and in consumer packages. At its modern processing plant at Spokane, it has installed a fully automatic machine for packaging peas. Most seed handled by the association is cleaned and processed at facilities in Fairfield, Wash.

The cooperative sells to both domestic and foreign markets, but during the past several years, export outlets have taken an increasingly larger portion of its supply. In 1962, some 75 percent of the crop was marketed in export channels.

During the decade of the 1950's, the association realized \$1.3 million more than the same tonnage would have brought at the average contract price throughout the area for the same period—or a cooperative return of \$4.28 per 100 pounds as compared with the average contract price of \$3.87.

Dry Bean and Pea Cooperatives

American Bean and Pea Growers, Inc., Denver, Colo., is a national marketing organization set up by bean and pea marketing cooperatives.

Marketing problems confronting dry bean and pea marketing coop-

eratives have become increasingly complex in recent years. Competition among the several varieties is keen; marketing agencies at centers of distribution must have a complete line of beans and peas easily available; wholesalers take only limited quantities at one time; and there is a growing demand for such products in consumer-size packages.

To pool ideas and exchange information on handling, storing, packaging, and distributing beans and peas, several of the larger bean and pea marketing cooperatives set up American Bean and Pea Growers, Inc. Members of this organi-

zation include three of the largest cooperatives in the field: Inland Empire Pea Growers Association, Michigan Elevator Exchange, and Outwest Bean, Inc.

American Bean and Pea Growers has purchased exclusive use of the brand name "Casserole" and each of the member organizations can package its local varieties under this brand in attractive cellophane packages.

Sales of all varieties are made in each market by a single sales representative, and each variety is shipped to the market from the production area, resulting in a highly efficient distribution system.

Sugarcane

UNITED States production of sugarcane is now divided about equally between Florida and Louisiana in the continental United States, with Hawaiian production almost equaling the combined production of these two States.

Glenwood Cooperative, Inc., Napoleonville, Assumption Parish, La., the first cooperative sugar mill in the United States, was organized in June 1932. Nineteen growers formed the cooperative and leased an idle mill in Assumption Parish with an option to purchase. Operations the first year were successful under a lease arrangement. Before beginning operations the second year, the association exercised its option to purchase the mill. The organization has continued to make progress.

Eight other sugarcane cooperatives were operating in Louisiana

in 1961-62, two in Florida, two in Puerto Rico, and one in California-Hawaii.

Together, the 14 cooperatives handling sugarcane marketed over \$210 million worth of the commodity for some 4,200 patrons during 1962.

Each of the Louisiana cooperatives owns and operates a mill to manufacture raw sugar from the cane produced by its members.

In general the plans of operation are similar. Each association receives sugarcane from producers and processes it into raw sugar. The cooperatives sell their raw sugar to refiners direct or through brokers.

Molasses is an important byproduct in sugar manufacture and represents a significant source of revenue for sugar cooperatives.

Through their cooperative mills, cane growers are able to exercise a



St. Mary Sugar Cooperative, Jeanerette, La., and 13 other cooperatives handling sugarcane, marketed over \$210 million worth of the commodity for some 4,200 patrons during 1962.

great degree of control over the quality of the manufactured product. At the same time, they benefit from any savings that result from improvements and increased operating efficiency. A comprehensive report covering operations of each association, including a report of a chemical engineer presenting comparisons of chemical and manufacturing results, is made to the board of directors each year.

Officers of the sugarcane cooperatives are thus able to show producers relative proportions of sugar

and other solids in juice produced from different varieties of sugarcane. They can advise growers on the cost of extracting sugar from different kinds of sugarcane and show effects of these costs on returns to the growers.

Sugarcane cooperatives, some long established and others recently organized, are generally making a satisfactory record. They are demonstrating that producers can enter a highly technical field and cooperatively carry their product a step further to the consumer.

Sugar Beets

SUGAR beets are primarily produced in 16 of the Western and Central Western States. Of these,

California, Colorado, and Idaho are normally the leaders and, during the 10-year period ending in

1960, accounted for more than 50 percent of the total United States production.

In 1962, there were 46 sugar beet cooperatives in the United States. These associations usually have an annual volume of over \$200 million and a total membership of some 30,000.

Cooperation among sugar beet-producers in the Western States took concrete form some 45 years ago with the organization of the first bargaining associations.

Their services to the producers are much more limited than those of the sugarcane cooperatives. Bargaining associations have no responsibility for assembling, processing, or distributing. Their primary function is to negotiate with processors regarding the price to be paid to growers for sugar beets.

However, they also perform other important functions. For example, these associations employ chemists to visit the factory during the operating season to check the tests made by factory chemists. Representatives of the associations also examine scales at beet dumps for accuracy and check the tare charged against the beets to make sure it is not excessive.

Nearly all growers belong to a local sugar-beet producer association. These associations, in turn, represent their members in one of the four regional organizations that negotiate annual contracts with processors.

Growers in the Great Plains and Rocky Mountain beet areas, including Colorado, Kansas, Nebraska, South Dakota, Montana, Wyoming, Idaho, Utah, Oregon, and Washington are members of the National Beet Growers Federation, Greeley, Colo. Sugar beet growers in Ohio, Michigan, and Wisconsin are represented by the Eastern Beet Growers Association, Saginaw, Mich.

The Western Sugar Beet Growers Association, Fargo, N. Dak., includes growers in the Minnesota-North Dakota-Iowa area. The California Sugar Beet Growers Association, Stockton, Calif., represents California beet growers.

The boards of directors of the regionals either negotiate with processors on price and nonprice provisions to be included in the contract or help their member locals perform this function. The price may be expressed as a percentage of the processor's net proceeds, or it may be based on the net price of sugar and the sucrose content of the beets.

The nonprice provisions in the contract generally relate to production, harvesting, and delivery practices.

In addition, the regionals provide their member affiliates with the latest information on production techniques, and they maintain liaison with Federal and State legislative and executive branches of government.

Honey

THE 7 existing honey marketing cooperatives in the United States, plus 1 located in Puerto Rico, served more than 1,000 pa-

trons in 1962, and marketed a combined volume of almost \$9 million worth of honey.

Cooperation among beekeepers is

not a new undertaking. Farmer Cooperative Service has records of honey marketing cooperatives formed nearly 60 years ago. Though they were successful for many years, most of these organizations, for one reason or another, no longer exist. Most cooperatives operating in 1962 had improved their financial position and their member relations program and had perfected their operating and processing methods.

Sioux Honey Association, Sioux City, Iowa, is the oldest and largest of existing honey marketing cooperatives.

This association has a rather ex-

Among honey marketing cooperatives, Sioux Honey Association is the oldest and largest. Its Sioux Bee brand has gained nationwide acceptance.

tensive merchandising organization that is doing an active job in selling and distributing its members' honey. It sells most of its honey under its own brands.

To more effectively serve its member-patrons and supplement operations at its central plant at Sioux City, the association also owns and operates branch plants at Lima, Ohio; Anaheim, Calif.; Tacoma, Wash.; Temple, Tex.; Waycross, Ga.; and Umatilla, Fla.

Sioux Honey also has added an export and bulk division with offices in Alhambra, Calif. This addition has been made to further the marketing of all types of honey in bulk, but principally the commercial grades that find their way into European markets and large domestic bakeries. The association normally markets upwards of 40 million pounds of honey annually. With the addition of this division, it anticipates a volume of 50 million pounds.

Sioux Honey Association has a modern laboratory at the plant in Sioux City where it employs a full-time chemist. Research conducted by the chemist is designed to develop new products and new uses for honey. The cooperative carries on continuous studies in an effort to find answers to processing problems and improve processing techniques.

Tests made on honey at time of delivery enable the cooperative to more accurately determine the quality of honey delivered by producers. Management is thus able to more effectively assist association members by pointing out quality deficiencies in a given lot. This enables producers to improve the quality of their product through better production processes.



A closely coordinated reporting program enables the association's plant managers to be fully informed regarding the type, quality, and condition of honey received at its several plants.

Finger Lakes Honey Producers Cooperative, Inc., Groton, N.Y., owns modern processing facilities and markets its own brands. In contrast to Sioux Honey Association, national in sales character, Finger Lakes Cooperative restricts its marketing largely to the New York City metropolitan area.

Other honey associations, whose activities are regional in scope, function primarily as marketing organizations. They include: Wakulla Beekeepers Association, Crawfordville, Fla.; Florida Honey Cooperative, Inc., Umatilla; Imperial Valley Honey Marketing Assn., San Bernardino, Calif.; Valley Honey Cooperative, Orangevale, Calif.; and Ohio Apiaries Cooperative Association, St. Paris, Ohio. Another honey cooperative, located in Puerto Rico, is Cooperativa De Apicultores, Ponce, P.R.

Maple Products

VERMONT and New York lead the 10 most important States in producing maple products. Together they normally account for some 70 percent of the total United States production.

Vermont Maple Cooperative, Inc., with headquarters at Essex Junction, Vt., was organized in February 1931, and operated for some 20 years. It was a nonstock cooperative. The association handled maple products for producers in nearly all parts of Vermont. The Vermont State Farm Bureau Cooperative succeeded it. The latter

ceased operations in the early 1950's.

Several local associations formed about 1920 were the first cooperatives to market maple products in New York State. Other locals were formed, but for one reason or another they discontinued operations.

Berkshire Pioneer Maple Producers' Cooperative, Inc., Ashfield, Mass., was the only cooperative known to be marketing maple products in 1962. In that year, it served 101 patrons and marketed over \$10,000 worth of products. It also purchased supplies for members.

Hay

COOPERATIVES handling hay are confined principally to the Western States. However, some large farm supply cooperatives in the East market large volumes of hay for their member-

patrons. Hay cooperatives normally handle more than \$10 million worth of hay for over 3,000 producers each year.

Imperial Hay Growers Association, Brawley, Calif., is among the

more successful hay cooperatives in this country. Incorporated in 1932, this association was organized to market its members' alfalfa hay to suppliers of feed for dairy cattle in the San Diego and Los Angeles milksheds.

Beginning with the 1940 season, Imperial Hay Growers inaugurated a system of pooling. All hay of the association's members grading U.S. No. 2 or better is pooled. Starting April 1 and ending May 31, each pool operates for 2 weeks; from June 1 to October 1, each pool lasts a month. On October 1, a seasonal pool is established which runs to March 31. All hay produced before October 1, but not declared in a pool existing prior to that date, is placed in the seasonal pool.

The association makes advances to members when hay is delivered and makes progress payments thereafter as hay is sold. The cooperative makes settlement when all hay in the pool has been sold.

Imperial Hay Growers' Associa-

tion has branch offices at El Centro, Hynes, El Monte, and Ontario, Calif. The association hauls hay to the consuming area and sells it direct through one of the association's four branch offices to dairy farmers in southern California's milksheds.

Imperial Hay Growers has some 175 members. Some are active producers of hay each year. Others grow hay from time to time under crop rotation programs. Almost \$2.5 million worth of hay is marketed annually. The organization also purchases a substantial amount of supplies for members each year.

Also included in the more important hay marketing cooperatives are the Antelope Valley Hay Growers Association, Lancaster, Calif., organized in 1931; Blythe Alfalfa Growers Association, Blythe, Calif., organized in 1938; and the San Joaquin Valley Hay Growers Association at Stockton, Calif., which got underway in 1940.

Forest Products

OVER 3,000 farmers are cooperating in harvesting, processing, and marketing the products of their forest lands. The raw products include logs, pulpwood, railroad ties, fence posts, tung nuts for tung oil, and gum spirits for producing turpentine and rosin.

The average annual volume of the cooperatives which handle forest products exceeds \$1 million. Farmer Cooperative Service records show associations in New York, Maryland, Pennsylvania,

Michigan, Connecticut, Georgia, and Mississippi.

Au Sable Forest Products Association, East Tawas, Mich., is one of the outstanding forest products cooperatives. It was organized in 1940. This association derives most of its income from the sale of pulpwood. The association does market other wood products, however, whenever advantageous for members.

In arranging for sales, the cooperative acts as an agent for its

patrons. Representatives of the association, usually the manager and some directors, negotiate with buyers on volume, price, and other terms of sale.

After representatives of the association "feel out" the market, contracts are drawn up between the individual member and the cooperative. The member agrees to cut a specified volume of wood, deliver it to the association, and load it on a railway freight car. The cooperative agrees to collect the money, deduct costs involved in making the sale plus any advance payment,

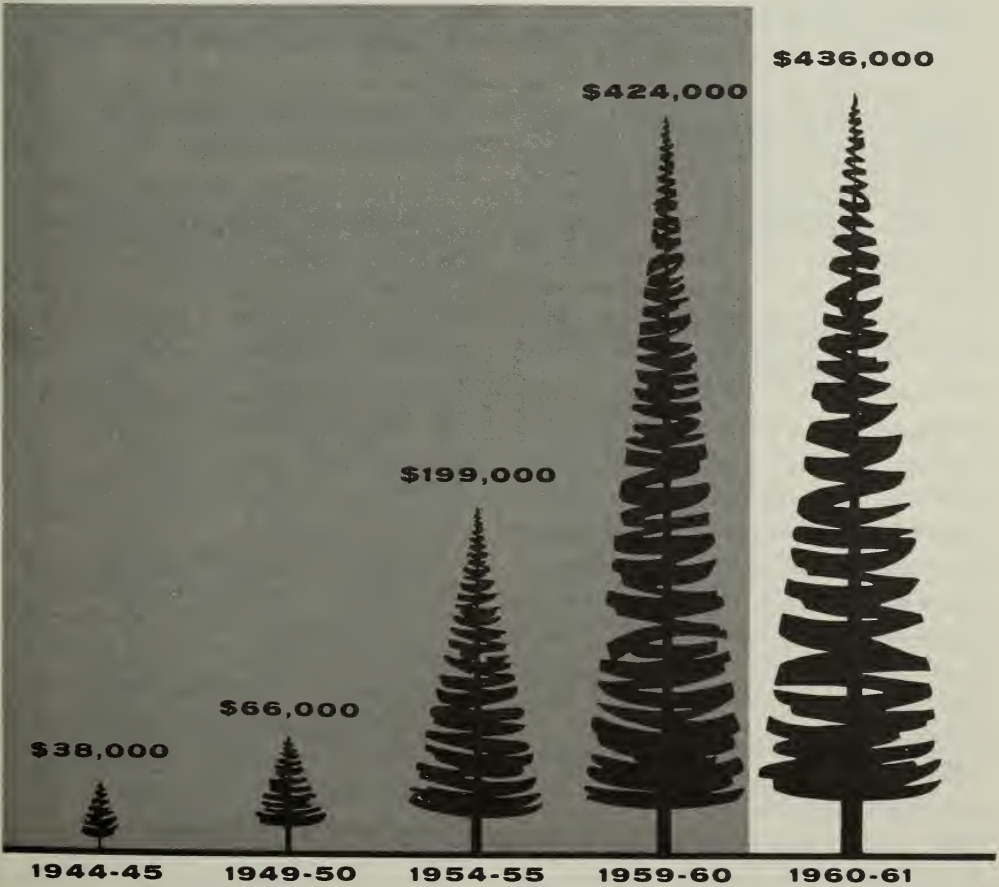
and return the net balance to the member.

In 1961-62, the association had 127 members, and its wood products sales aggregated over \$325,000.

Forest Owners, Inc., Yazoo, Miss., is a relatively new forestry cooperative. It was incorporated February 27, 1961. It has 140 members and had a sales volume that approached \$250,000 during its first year of business operation.

The basic purpose of this organization is to provide timber landowners in Mississippi with a management and marketing agency that

Au Sable Forest Products Association has shown a growth in dollar sales volume. Income from timber marketing operations increased from \$38,000 in 1944-45 to \$199,000 in 1954-55. By 1959-60, this figure had more than doubled and in 1960-61 the total was \$436,000.



will help them protect and develop stands of merchantable timber and obtain for them maximum returns from products sold.

Although the association has

wide powers, such as to manufacture and process forest products, emphasis is presently on providing forest management services and bargaining for price.

Seed

ALMOST 140 cooperatives market seeds for growers. This number includes approximately 25 associations marketing seed exclusively and 9 regional cooperatives marketing seed as a sideline service.

Although seed marketing associations do not handle a large percentage of the total volume sold commercially, they have made several definite contributions for their member-growers.

They have been able to build up a reputation for high-quality seeds and dependable performance. In addition, their operations have frequently helped to reduce local operating margins and establish more accurate grading and dockage practices.

Specialized Seed Marketing Cooperatives

Specialized seed marketing cooperatives usually operate in regions most favorable to the production of high-quality seed. They process and distribute seed directly to wholesale buyers. Where volume is small, cooperatives may buy seed on an estimated clean-seed basis, or they may make returns on the actual outturn from the cleaners.

Most use the pool method of marketing—some exclusively. Others give the producer his choice of pooling or accepting the current

cash market price. Experience indicates, however, that the price per pound on final pool settlements averages higher as a rule and with less speculative risks to growers and to the associations.

Seeds handled by the specialized associations include alfalfa, clover, onion sets, cottonseed, Kentucky bluegrass, seed potatoes, and seed peas. Some larger specialized seed marketing cooperatives include Ore-Approved Seed Growers Assn., Harrisburg, Oreg.; Caladino Farm Seeds, Inc., Willows, Calif.; and the Missouri Seed Growers Cooperative, Kansas City, Mo.

A few specialized associations have developed programs to help their growers produce superior seeds.

For example, Crites-Moscow Growers, Inc., Moscow, Idaho, has a program of research, plant breeding, and supervised production to provide seed for producing quality products wanted by the canning or freezing trades.

Cooperatives handling seed potatoes make a special effort to get foundation seed of the highest quality for their growers. Two associations produce their own stocks, growing seed under the best conditions of isolation and disease control. Some associations have established their own breeding and producing programs for hybrid



Caladino Farm Seeds, Willows, Calif., uses modern equipment such as this to harvest Ladino clover seed.

seed corn. The aim is to find crosses most useful and profitable to their members.

Farmers Forage Research Cooperative, Madison, Wis., (FFR) organized in 1960, does basic and applied research in developing improved varieties of alfalfa, clovers, and grasses. It leases 72.5 acres near Battle Ground, Ind., on which it has built a combination laboratory, office, and large greenhouse. In 1962, the cooperative tested 18,000 seedlings there.

Two western seed cooperatives will produce the improved varieties, and they will be marketed by eight large midwestern, southern, and eastern regional associations. As other crops are added, and its merchandising activities expanded, FFR plans to include other farmer-owned cooperatives in its production and marketing system.

Membership and dollar volume of the specialized seed associations are comparable to those of the larger local marketing cooperatives. Territories served by specialized seed cooperatives are usually larger. Working capital needs are low for those marketing on a pool basis, while those providing other commodity services carry larger inventories and accounts receivable.

About 60 percent of the seed marketing associations provide processing and marketing services. The other 40 percent assemble seed and sell it in the rough to processors.

Regionals Provide Service to Locals

Small local associations have found that the benefits of process-

ing, warehousing, and merchandising seed can best be obtained through a regional cooperative. The aggregate volume of a number of locals is usually large enough to justify machinery, equipment, and personnel for an effective seed marketing service by the regional.

Such regional associations can also provide educational material to member cooperatives and their growers. They can keep them informed as to prospective crop and marketing conditions. Some re-

gional cooperatives that purchase seed for their member local associations are well-equipped to do an excellent job of processing and marketing. They employ approved practices and policies recommended by specialized seed marketing associations.

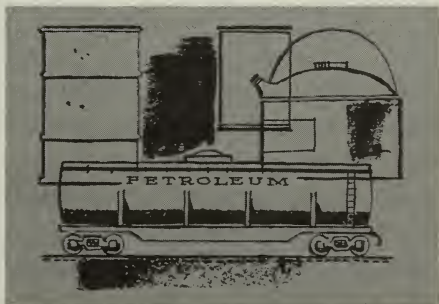
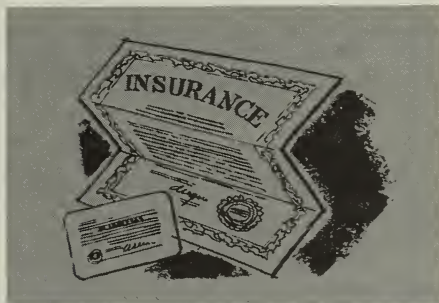
Under existing conditions of seed production, increasing participation by regional cooperatives appears the most promising means of improving the general level of cooperative seed marketing service.

Other Special Crops

IN addition to the special crops mentioned, cooperatives also market minor crops and local products. These include flax, furs, hemp, hops, cut flowers, ferns, bulbs, nursery

stock, and sorghum products. Many of these cooperatives—some with an average annual business of over \$1 million—have developed outstanding organizations.

FARM SUPPLY AND SERVICE COOPERATIVES



Farmers Purchase Supplies and Services Cooperatively

by Homer J. Preston
Director, Purchasing Division

THE highly specialized commercial agriculture of the United States is closely interrelated to other economic activity. In response to the economic needs in this

system, farmers have organized cooperatives to assist in purchasing various production supplies and in providing the necessary off-farm services.

Evolution of Cooperatives Parallels Farmers' Needs

THE evolution of farmers' purchasing and service-type cooperatives parallels the change in the individual farm activity. In the early history of the United States, the population was largely agricultural; and to a degree each farm was self-contained.

Under such conditions farmers did not purchase any appreciable quantities of production supplies, nor did they have a need for various off-farm services. During that time, farmers obtained supplies or services on an individual or an informal group basis.

As the character of agriculture changed and farmers had increasing need to purchase a wider variety—and larger quantities—of production supplies, the informal groups began to organize as local cooperatives. Similarly, service-type cooperatives were organized.

This was the period of "car-door" delivery and part-time cooperative employees. Gradually these local cooperative efforts grew, and strong local cooperatives developed.

With growing farm size and greater specialization, farmers' needs exerted economic pressures on local cooperatives. Farmers working through them organized regional cooperatives to further improve the farmers' position in purchasing production supplies.

Regional cooperatives have been able to either produce certain production supply requirements or purchase in large quantities and thereby reduce costs. Generally, the nature of the service-type cooperatives has not encouraged the organization of regional cooperatives. Rather, the character of service-type cooperatives has changed as the economic needs have changed.



Early beginnings of farm supply cooperatives focused on lowering costs of the supplies. Farmers provided the local transportation and the warehouse was the rail car—the old “car door” delivery system.

Specific Cooperative Objectives

BASICALLY, farm supply and farm services cooperatives have been organized to make the individual farm operations more profitable. In performing this function, cooperatives have the following specific objectives:

1. *To bring about economies in costs of supplies and farm services.* This is achieved by developing more efficient practices, adopting technological improvements through large volume operations, by returning net margins or savings to patrons and in general insuring that margins are in line with the services that are being provided.

2. *To provide supplies and services of such quality and type that*

farm production costs will be minimized. As the off-farm businesses of farmers increase, a major responsibility of these cooperatives is to provide quality products and services as a means of reducing costs. Quality standards and high performance standards cannot be lowered as a method for increasing the cooperatives' savings or net margins.

3. *To provide dependable supplemental services adapted to the farmers' needs.* Many of the basic production supply items and major farm services require supplementary services to be most useful to the farmer. Purchasing and service cooperatives try to give these

tailormade services as another method of increasing farm income.

4. *To provide effective market strength.* Farmers on an individual basis have limited market strength in purchasing services or production supplies. Through their cooperatives, the limited strength of the many individual farmers can be used to achieve market strength.

The operations of individual cooperatives are based upon these four objectives. Cooperatives may stress one of the objectives more than the others in a given economic climate and over time the emphasis may shift to other objectives. For example, the initial emphasis of farmers in organizing a cooperative may be a reduction in costs, but later the emphasis may be on providing market strength.

The production supply needs of farmers are well known, ranging from such major items as feed,

seed, fertilizer, and petroleum to the miscellaneous production supplies such as minor hardware items.

The relative importance of the items may shift as farmers' needs change. For example, there has been a growing emphasis on building supplies in recent years. In some instances, cooperatives have provided the materials and arranged for construction on the farm.

The off-farm service needs of farmers have also changed. Essential services now being provided include, among others, transportation, warehousing, credit, insurance, irrigation, electricity, telephone, frozen food lockers, dairy herd improvement, artificial breeding, soil conservation, and livestock grazing on the national domain.

Commercial farming, as we know it today, would be impossible without these off-farm services.

The essential water for many irrigated areas of the United States depends upon cooperatives to provide this service. Here water is being used to irrigate a field of soybeans.





The variety of services offered by this cooperative indicates the many ways cooperatives serve farmers and provide "one stop" service.

There are more than 10,000 service-type cooperatives and mutual companies. They have been flexible in their operations and have adjusted these as farmers' needs have changed over the years.

For example, the typical frozen food locker cooperative was initially organized to provide locker storage with some limited amount

of fresh meat processing. Currently, these organizations emphasize the servicing of home freezers and local institutional outlets. They are an efficient marketing means in those areas having a small volume of locally produced products to be marketed. Frozen food locker plants can move these products to outlets in the area.

Supply Cooperatives

by J. Warren Mather, Chief
and Staff
Farm Supplies Branch

FARMERS buy an increasing amount of supplies and equipment each year for their farming operations. Such items accounted for 56 percent of their total production expenditures, and required the use of about 42 percent of their cash receipts from farming in 1963.

Farmers have long used cooperatives to obtain their farming re-

quirements. But the amount of supplies purchased has increased as farming has become more scientific, more mechanized, more diversified, and more commercialized. As a result, farmers buy formula feeds, high-octane motor fuels, high-analysis fertilizers, complex pesticides, specialized equipment, and other items in large quantities.

The commercial farmer spent an average of \$4,000 for production supplies and equipment in 1962.

Farmers purchased about \$2.3 billion worth of production supplies and equipment through cooperatives in 1961-62. This amount represented about one-seventh of the total spent by all farmers for these items, and one-fifth of what they spent for feed, seed, fertilizer, petroleum, and pesticides.

About four out of every five farmers in the United States used cooperatives for some of these items that year.

Farmers and others also purchased another \$300 million worth of supplies for home and family. These included heating and motor fuels, lawn and garden items, hardware, and the like.

The term "purchasing" in this section broadly refers to buying through cooperatives that may either retail, wholesale, or manufacture supplies, or produce raw materials for manufacturing. It may also include the use of related services such as transportation, warehousing, financing, and delivering.

Have Specific Objectives

FARMERS organize cooperatives for purchasing supplies to make their farming operations more profitable. These cooperatives have the following objectives:

1. *To reduce costs of production supplies and equipment for members.* This is realized by developing more efficient practices, by volume buying, manufacturing or processing, distributing some supplies in bulk direct from plants to farms, and returning net savings or margins above operating costs to patrons each year.

2. *To provide supplies of a quality that will produce the greatest returns for the farmer-user.* Cooperatives act as purchasing agents to select supplies that will result in maximum yields per acre and gains

per pound for the farmer. They usually help provide the type and quality of feeds, seeds, and fertilizer, for example, that are recommended by the State agricultural experiment stations. They do not sacrifice quality to make the greatest possible patronage refunds for farmer-patrons.

3. *To provide dependable services that help improve farm practices and reduce time and labor for farmer-members.* Cooperatives provide many services related to the supplies they handle. These include bulk delivery of feed, custom spreading of fertilizer, rental of equipment, and the like. Cooperatives also provide specialists to advise on the use of supplies and on farm management practices.

How Organized and Financed

FARMER cooperatives handling production supplies are organized, structured, and financed in various

ways and carry on their business operations at different levels of integration.



Farmers look to their cooperatives for supplies and services which will up their yields, lower their costs, and increase their net incomes.

Types and Structures

A production supply cooperative is defined as one whose supply and equipment volume constitutes from 51 to 100 percent of its total sales.

A marketing association with a supply or sideline department is one whose marketing volume constitutes over half of its total sales.

Most production supply cooperatives are local retail associations serving the trading area of one town or city. Some have one or more branches in outlying communities, and in some Central States, their territories follow county lines. In other areas—notably on the west coast and the east coast—regional cooperatives retail supplies in large areas through branch stations or service centers, subsidiary cooperatives, and dealer agents.

Advisory committees of farmers often are established at each of

these retail outlets. These regionals and the locals are called *centralized* cooperatives because the farmers have direct membership in them and are served from the cooperative's facilities.

Local retail cooperatives form regional wholesale cooperatives to supply their needs. These regional cooperatives in turn form national purchasing associations or area manufacturing associations to provide various supplies. These regional and national associations are called *federated* cooperatives because their membership consists of other cooperatives, which in turn have farmer-members.

A few regionals serve local cooperatives on a wholesale basis and farmers on a retail basis. Several regionals provide financing and management services to local cooperatives desiring them.

Almost all local, and many regional production supply coopera-



Many farmers want their cooperatives to provide custom bulk services which will save time and labor on their farms. This truck spreads lime and fertilizer directly on the farmers' fields, saving time and money and illustrating yet another service cooperatives can offer.

Many Wisconsin farmers obtain their fuel oil through Burlington Consumers Cooperative—a member of Midland Cooperatives, Inc., Minneapolis, Minn. Such a farm service as supplying fuel oil is another way cooperatives are serving farmer-members.



tives, are organized on the basis of one member, one vote. In a few States, cooperative laws base voting on stock ownership. Some regionals, however, provide for voting according to patronage or volume of business provided, or according to the membership of their affiliated locals.

Financing Methods

Most production supply cooperatives obtain capital from members by the sale of common and preferred capital stock. Others sell certificates of membership, indebtedness, or equity. The cooperative usually pays a nominal rate of dividend or interest on such capital.

Many farm supply cooperatives acquire needed capital by retaining part of their annual net savings in the business. In such cases, all or part of the patronage refunds declared from current net savings may be distributed to members in capital stock or other forms of equity capital. Some net savings also may be placed in a members' equity reserve or surplus account.

Many associations use the revolving capital plan of financing. Under this plan, patronage refunds are retained in the business for one or more years until the necessary capital is accumulated. Then refunds on each current year's operation continue to be deferred or retained, but the cash is used to repay those first deferred and accruing to members.

The refunds are revolved in the order of their retention, often on a 3- to 7-year basis, and at the discretion of the board of directors. Equities under such a plan may be evidenced by certificates of capital stock, equity, indebtedness, or finance funds, or by allocated book

credits, allocated equity reserves, or statements of deferred patronage refunds.

A revolving capital plan has these advantages: (1) It provides a convenient means by which each member contributes capital in proportion to the amount he uses the association, and (2) it keeps the ownership of the association largely in the hands of active members or patrons by retiring the oldest outstanding equities each year.

Cooperatives may obtain additional funds by borrowing from the banks for cooperatives, which are supervised by the Farm Credit Administration; from local banks; and from members or other individuals.

They also obtain accommodation or operating credit on merchandise purchased from their suppliers. A few regional supply cooperatives sell debentures to, or borrow funds from, insurance companies.

Follow Definite Policies and Practices

Production supply cooperatives conduct daily business transactions similar to those of other business concerns that handle supplies. The principal differences in their policies, practices, and objectives are:

1. Cooperatives purchase for their farmer-members the types and qualities of supplies farmers need to give them the greatest yields or gains, while other business concerns place more emphasis on returns on investments of stockholders, many of whom may not be farmers.

2. Cooperatives return net margins from operations to their member-patrons on the basis of their patronage, while other business concerns distribute their

profits to the owners or partners, or to stockholders on the basis of ownership of stock.

3. In cooperatives, member-users largely provide finances in proportion to their patronage, while in other concerns, investor-stockholders—who may account for only a small proportion of the volume—often provide most of the capital.

4. In cooperatives, control is vested in farmer-members—usually on the basis of one vote per member. In other concerns, control is in the hands of an individual owner, partners, or stockholders whose control depends on the number of shares of stock they own.

Purchasing Supplies

Most local cooperatives obtain the greater part, or all, of their major supply items, such as feed, fertilizer, and petroleum products, from cooperative wholesale associations with which they are affiliated. Some locals, however, obtain a portion or all of their requirements from other sources. Miscellaneous supplies, which may not be handled by all cooperative wholesalers, are the items most frequently purchased on the outside.

The manager and the board of directors determine the types of supplies to purchase. However, any proposed new lines usually are first discussed at membership meetings. Managers determine the amount of supplies to keep in stock.

Wholesale cooperatives encourage local managers to order fertilizer and seed well before the seasons when they will be needed and to take early delivery on fertilizer so that more space will be available at the mixing plants.

Regional cooperatives, either individually or cooperatively, manu-

facture much of the requirements of member locals. Such items, however, as steel products, tires, batteries, poultry and dairy equipment, and miscellaneous supplies are generally obtained through one of the two national supply cooperatives owned by the regional associations. These, in turn, contract with manufacturers for quantity purchases of supplies that meet certain specifications. Some regionals purchase part of their needs direct from manufacturers.

Inventory Management

Warehousing, materials handling, and stock control are important operations of production supply associations. Inventories may be carried at their manufacturing plants, wholesale warehouses and terminals, and at retail warehouses, stores, and bulk plants.

With the rapid increase in bulk delivery of feed and bulk application of fertilizer, the warehousing of sacked goods at wholesale and retail points has been reduced. And, as local cooperatives increase in size, more are taking carloads of fencing and roofing, individually or with a nearby association, directly from manufacturers.

The frequency of taking a physical count of inventories varies by commodities. Petroleum, for example, may be inventoried daily, weekly, or monthly; feed weekly; and general farm supplies monthly, quarterly, or semiannually. Some associations keep perpetual or daily running inventory records of farm machinery parts and hardware items.

Cooperatives usually compute rates of inventory turnover for each major type of supply. This is valuable in measuring the efficiency of the use of inventory capital.

Pricing Supplies

Cooperatives generally price their supplies at market levels prevailing for items of comparable quality. This is considered good practice because it reduces the chances of friction. It also permits the cooperative to retain net margins in the business to cushion the effects of price declines, price wars, and operating losses.

Under this method, the cooperative distributes most of its net margins annually to member-patrons, or all patrons, on a patronage basis. This distribution is called a patronage refund.

Cooperatives generally follow industry practices in their areas with respect to quantity or volume discounts and cash discounts. Some also give discounts for early booking of orders and for early delivery of supplies.

Distribution Methods

Cooperatives distribute supplies in much the same way as other concerns in the same line of business. For certain commodities such as petroleum products, delivery service to the farm is customary. In areas where delivery service is provided on supplies by other concerns, the cooperatives render such service. Or they may make a price allowance to compensate the farmer for hauling his own supplies.

In other cases, the cooperatives may set a flat price for supplies at the warehouse. If farmers desire delivery, they pay an extra charge to cover the cost.

Many cooperatives now provide bulk delivery of feed to large users. Bulk delivery of fertilizer has become an important service of cooperatives.

Wholesale cooperatives and those manufacturing supplies usually follow customary practices for the various products they handle or manufacture. Some sell f.o.b. their own plant or warehouse, while others sell on a delivered basis.

Many cooperatives use common merchandising methods such as displays, advertising, and volume building contests or campaigns in distributing their supplies. However, they generally do not spend as much on advertising and selling as other firms because of their membership and ownership relations.

Cooperatives devote more attention to educational activities—pointing out that they purchase supplies under specifications to fit the farmers' needs and that the farmers will receive the supplies at cost after final settlements or refunds. They also provide much information on the proper use of various supplies and on good farm management practices.

Credit Policies

Most production supply cooperatives operate on a limited or accommodation credit basis. Under this method, credit is allowed up to a certain amount or extended for a certain period—usually 30 to 60 days—after which no more credit is allowed until the account is paid. Some associations give a discount for cash; others add an interest charge for delinquent accounts. Applications for credit usually are approved by the manager, but sometimes by an officer or committee of the association.

Credit for fertilizer, building supplies, farm machinery, and farm and home equipment may be granted on a deferred or install-

ment basis. Interest-bearing notes are used. In recent years, large amounts of feed have been financed on a secured or term basis and under contract production programs.

Cooperatives must follow businesslike policies in extending credit and collecting receivables to avoid bad-debt losses, collection costs, tying up working capital, management worries, and dissatisfaction among members.

Patronage Refund Policies

Most supply cooperatives distribute their net savings or net margins at the end of each fiscal year. A few distribute them quarterly or semiannually.

The general practice is to (1) pay a reasonable rate of dividend—4 or 5 percent—on outstanding capital stock or other certificates of equity, especially if they

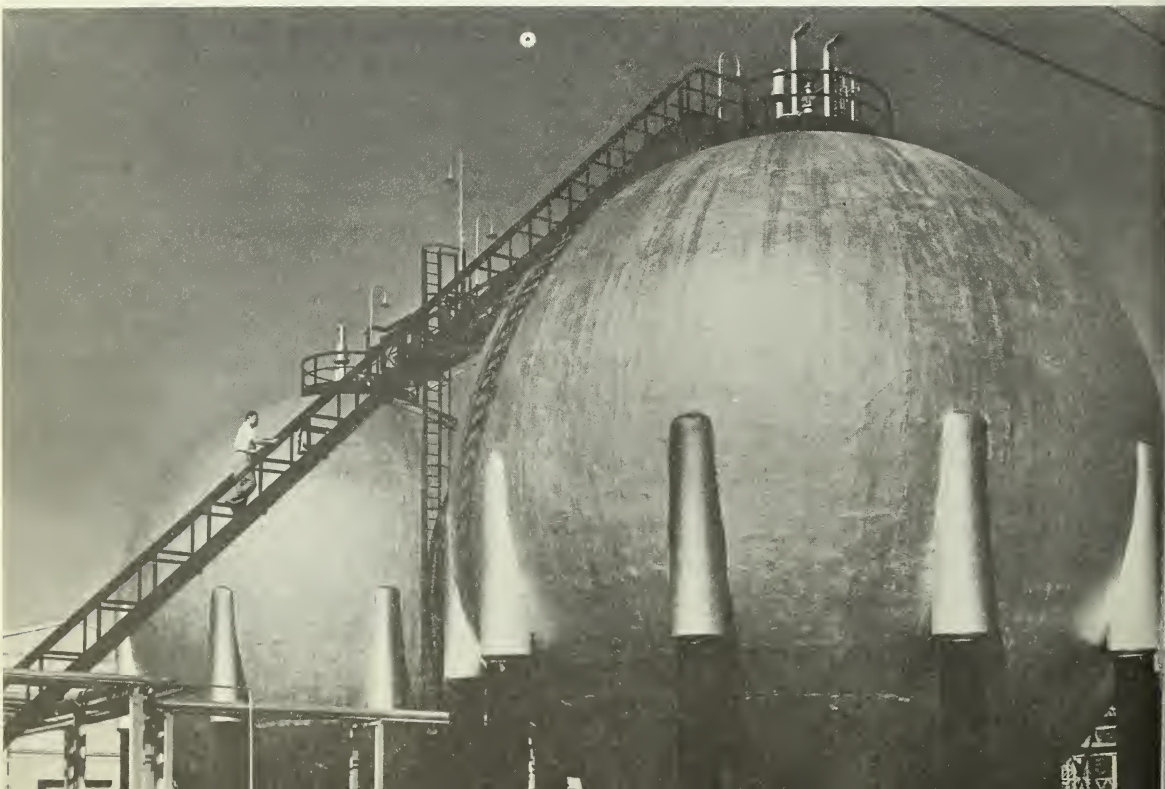
represent direct investments by the members; (2) place 10 percent or more of the total net savings in a members' equity reserve account or in a general surplus account; and (3) declare the remainder of the net savings as patronage refunds on the purchases of each patron or member-patron.

Many supply cooperatives declare one rate of patronage refund per dollar of total supply sales. Some declare different rates for different supplies depending on the extent to which operations are departmentalized and on the variations in net savings on different items.

The proportion of patronage refunds currently paid in cash, in capital stock, or in other forms of equities depends on the capital needs of the associations and income tax laws and regulations.

Some cooperatives declare patronage refunds only to members or

Today's farmers now have large equities in cooperative facilities such as these anhydrous ammonia storage spheres.



stockholders, but many declare such refunds either to all producer-patrons, or to regular patrons in the trade area, or to all patrons. If nonmember patrons are eligible for membership, their refunds often are first credited toward purchase of a share of capital stock or

payment of a fee that is required for membership.

Less than half of these cooperatives, however, declare refunds to all patrons and attempt to meet the other strict requirements for exemption from the payment of Federal income taxes.

Developed Over the Years³⁰

COOPERATIVE purchasing of supplies by farmers began early in the history of this Nation. A few farmers in a neighborhood—often members of the same church, lodge, or club—would buy together a carload of seed, salt, twine, flour, feed, or fertilizer.

Earliest efforts in organized cooperative purchasing occurred about 1850 in farmer clubs in Illinois and Wisconsin. One of the first production supply associations organized in 1863 at Riverhead, N.Y., to buy fertilizer at wholesale. It soon learned to avoid pitfalls of extending credit because its buying agent—a sea captain—had to have gold to purchase the fertilizer.

Farm Organizations Sponsored Buying

For about 10 years after the Civil War, a surge of cooperative buying developed through local and State Granges. Purchasing agents were established to assemble orders and place them with dealers, who shipped direct to farmer-members at special prices.

The most important contribution of the Grange to cooperative purchasing, however, was said to be its policy of recommending that co-

operatives be formed according to Rochdale principles. After 1875, numerous Grange production supply and general warehouse stores were organized throughout the country. However, many lasted only a few years.

Between 1880 and 1890, many business agencies and exchanges similar to those of the Grange were organized by another farm organization—the Farmers Alliance. But with all this interest in cooperative purchasing, less than 100 separate supply cooperatives were in operation in 1900. A number of marketing associations also handled a limited amount of supplies.

The next nationwide stimulus to cooperative purchasing of production supplies came from the Farmers Union, organized in 1902. At first, business agents for local, county, and State Farmers Unions made purchases for members. Mail order systems also were used. These were followed by the organization of production supply cooperatives along the modern pattern. In addition many Farmers Union grain marketing cooperatives in the Wheat Belt and in Wisconsin, Minnesota, and Iowa added supply services.

The American Society of Equity, also formed in 1902, sponsored cooperative purchasing as well as marketing.

³⁰ See page 49 for other details on early history.



In early days farmers hauled supplies from their cooperatives; others pooled orders and took supplies directly from rail cars.

During the period from 1901 to 1920, approximately 2,250 production supply cooperatives organized and 350 discontinued operation. Over half of these formed in the 1916-20 period. The number of active supply cooperatives reached a peak of about 2,000 in 1922.³¹

Several regional production supply cooperatives, formed during this period, are still operating.

Examples include: The Fruit Growers Supply Co., Los Angeles, organized in 1907, to provide containers and packaging materials for citrus growers in California; Farmers Union State Exchange, Omaha, Nebr. (1914), to serve both farmers and local cooperatives; Central Cooperatives, Inc., Superior, Wis. (1917), to serve local cooperative stores in the northern Wisconsin and Minnesota areas; Eastern States Farmers' Exchange, Inc. (now Agway, Inc., Syracuse), West Springfield, Mass. (1918), to

serve farmers through branch warehouses and a car-door distribution system; and the Cooperative Grange League Federation Exchange, Inc. (G.L.F.—now Agway, Inc.), Ithaca, N.Y. (1920), which employs agents as well as local service cooperatives as distribution outlets.³²

One of the factors encouraging the rapid development of cooperatively buying supplies was the success experienced in making savings from the wide margins existing at that time. World War I also stimulated food production and use of production supplies.

The deflation in prices following World War I caused the failure of a number of general supply cooperatives that had overexpanded. As a result, the number of active supply cooperatives declined slightly until 1928. This was offset to some extent, however, by a number of marketing associations adding supply services. The adverse eco-

³¹ Only about 1,000 supply cooperatives, however, were reporting to the U.S. Department of Agriculture and listed in its records as operating in 1922.

³² Central Cooperatives, Inc., and Midland Cooperatives, Inc., merged in 1963. See also footnote 20.

conomic conditions facing farmers during the 1920's, coupled with the growing trend toward mechanized and commercialized agriculture, started farm supply cooperatives on the increase again around 1928.

Development of another general farm organization, the Farm Bureau, also provided stimulus to cooperative purchasing in the 1920's. County and State Farm Bureaus first served their members by using an agent system in purchasing carloads of supplies. In other cases, they bargained with local dealers for price concessions or discounts for their members.

It was not long, however, until numerous county Farm Bureau cooperatives were being organized, and they in turn formed State wholesale supply associations. These were most active in the central area and the South.

The Mississippi Farm Bureau began purchasing fertilizer for its members in 1921, Indiana followed in 1922, and Ohio the following year. Within a few years, all three had organized separate State wholesale associations. Similar ones were formed in Illinois in 1927 and in Michigan in 1929.

Petroleum products were one of the newer items these cooperatives began to handle in quantity, along with a broad line of other production supplies and equipment.

The State Farm Bureau cooperatives were among the first to form area federations for purchasing and manufacturing supplies. One of these developed into the United Cooperatives, Inc., Alliance, Ohio, whose service is national in scope.

At least eight other regional supply cooperatives were formed in the 1920's.

A total of 1,588 predominantly

supply purchasing cooperatives were listed as active by the U.S. Department of Agriculture for the 1930-31 crop year. They had 392,000 members and a volume of about \$215 million.

Farmers in the East organized cooperatives in the period from 1910 to 1930 mainly to purchase feed, seed, and fertilizer. Those in the South specialized in fertilizer and seed. In the Midwest, farmers formed many separate petroleum associations, or they had petroleum services added by their grain marketing cooperatives. In the Far West, feed and poultry equipment and fertilizers, insecticides, containers, and other orchard and packing supplies were bought on a cooperative basis.

Numerous supply cooperatives also were formed independently of general farm organizations during this period. An example was Eastern States Farmers' Exchange, Inc. (now Agway, Inc.). Most of the supply cooperatives, however, had the support of farm organizations.

A few regional cooperatives resulted from mergers of two or more associations. The largest supply cooperative in operation for many years—Cooperative G.L.F. Exchange, Inc. (now Agway, Syracuse)—resulted from merging the supply departments of the Grange, Dairyman's League Cooperative Association, New York City, and the Farm Bureau in New York State.

Many independent supply, general store, and petroleum cooperatives also were organized in Minnesota, Wisconsin, and other Midwestern States. In 1926, local cooperatives formed the first petroleum wholesale cooperative—now known as Midland Cooperatives,



A modern feed mill at Guntersville, Ala., owned by Cotton Producers Association, Atlanta, Ga. It is under the supervision of Cooperative Mills, Inc., Baltimore, Md.

Inc., Minneapolis, Minn. Consumers Cooperative Association, Kansas City, Mo., organized 3 years later.

Marketing Groups Added Supplies

Over the years, marketing cooperatives diversified their operations by handling supplies as a sideline. Members requested that they purchase one or more of the main items used in producing a specific product, and such service usually helped round out volume where marketing was seasonal.

The most common supplies added were petroleum products, feed, seed, and fertilizer by grain marketing associations; feed and equipment by dairy and poultry marketing cooperatives; and containers, fertilizer, seed, and insecticides by cotton, fruit, and vegetable marketing organizations.

These regional marketing cooperatives also manufacture certain

farm supplies used in quantity by their members. Fertilizer, feed, and shipping containers are the principal ones handled. As an example, the Cotton Producers Association, Atlanta, Ga., has fertilizer plants and feed mills to supply the needs of its farmer-members. More efficient operation has been accomplished through more complete use of personnel and through spreading the overhead over a large volume of business.

In 1961-62, about 65 percent of all associations that marketed farm products as their major activity also handled farm supplies. Their net supply volume of \$600 million represented 27 percent of the net value of all supplies handled by cooperatives.

Increased Steadily After 1930's

Production supply cooperatives continued to increase in the 1930's.

As their services were recognized, their membership and volume of business increased steadily. Economic conditions encouraged farmers to look to cooperatives to keep down their costs. By 1940-41, production supply cooperatives numbered 2,657; they had 980,000 members and about \$307 million of business.

Some of the regionals formed during the 1930's were Farmers Union Central Exchange, Inc., St. Paul, Minn. (1931); Pacific Supply Cooperative, Portland, Oreg. (1933); Pennsylvania Farm Bureau Cooperative Association, Harrisburg (1934); Farmers Cooperative Exchange, Inc., Raleigh, N.C. (1934); and National Cooperatives, Inc., Albert Lea, Minn. (1933).

World War II and postwar conditions stimulated the organization of additional supply cooperatives during the 1940's. Some of these were established to manufacture supplies and give farmers more dependable sources. The shortage of supplies existing at times during this period caused a rapid increase in manufacturing and in memberships and volume of cooperative purchasing. Many regional cooperatives added fertilizer and feed plants, and the number of cooperative oil refineries reached a peak of 20 in 1949.

Regional wholesale associations to handle feed and other supplies organized in Missouri, Arkansas, and Tennessee. The National Cooperative Refinery Association organized and purchased an existing plant at McPherson, Kans., in 1943.

Associated Cooperatives, Inc., Sheffield, Ala., also formed in 1943 to purchase fertilizers for local and

regional cooperatives. Select Seeds, Inc., Ft. Wayne, Ind., was set up by regional cooperatives in 1947.

Mississippi cotton growers invested some \$4 million in Mississippi Chemical Corporation and built the first farmer-owned nitrogen plant at Yazoo City in 1948. During the period from 1941 through 1950, another 15 small regional wholesale cooperatives formed. Many were set up to manufacture one or two farm supply items.

By 1950-51, a total of 3,282 production supply cooperatives with 2.9 million members had over \$1.9 billion of gross business and \$1.1 million net, excluding intercooperative volume. In addition, about 3,300 marketing and 100 service cooperatives handled another \$800 million of gross supply business and \$600 million on a net basis after eliminating duplication.

Added Products and Services in 1950's

Supply cooperatives continued to progress in the 1950's, reaching peaks in number, memberships, volume, members' equities, integration of operations, use of research, diversity of services, and net savings for farmers.

These cooperatives continued to adjust to rapid changes in agriculture. They added a wider variety of supplies—especially pesticides, animal health products, liquefied petroleum gas, liquid nitrogen, and building supplies.

Many associations further integrated their operations on a vertical basis. They built new automated feed mills and seed processing plants. They spent large sums in modernizing the larger refineries and sold their smaller ones. They also built several new

nitrogen plants requiring heavy capital outlays. They added granulating equipment to dry fertilizer plants and built many bulk blending plants in the Midwest.

Regional associations became more basic in fertilizer. Their national fertilizer cooperative started mining and processing phosphate rock in the West, acquired the stock of a potash company, and invested in, and contracted with, nitrogen manufacturing organizations.

A number of regional cooperatives made an important advance when they arranged to share in the costs and results of several feed research and testing farms. Several regionals also established a research farm for forage seeds and three in the East joined in a cooperative hybrid seed corn project.

Farmers also looked to their cooperatives for more related services such as feed grinding and mixing, bulk feed delivery, seed cleaning, fertilizer spreading, and paint spraying. Some requested that their supply cooperatives add marketing services. An increasing number expected accommodation credit and seasonal financing. Several cooperatives handling broiler and turkey feed began contract production programs. Others depending on layer feeds expanded production credit for egg producers.

By 1963, many wholesale cooperatives had become regional service associations and provided auditing, bonding, insuring, financing, supervision, membership information, and educational services.

Interest in mergers increased among both local and regional supply associations in the 1950's, although relatively few such mergers had occurred by mid-1963.

Western Fertilizer Association, Seattle, Wash., merged with Central Farmers Fertilizer Co., Chicago in 1958.

Illinois Farm Supply Co., Bloomington, and Farm Bureau Service Co. of Iowa, Des Moines, merged to become FS Services, Inc., Bloomington, Ill., in 1962.

The regional supply and grain marketing cooperatives in Indiana and in Michigan merged in each State in 1949 and 1962, respectively.

Midland Cooperatives, Inc., Minneapolis, Minn., and Central Cooperatives, Inc., Superior, Wis., voted to merge on December 1, 1963.

Eastern States Farmers Exchange, Inc., W. Springfield, Mass., and Cooperative G.L.F. Exchange, Inc., Ithaca, N.Y., voted to merge effective July 1, 1964 as Agway, Inc., Syracuse, N.Y.

The number of predominantly supply cooperatives reached a peak of 3,387 in 1958-59 and declined to 3,206 in 1961-62. Their memberships were at a high of 3,680,000 in 1960-61 and dropped to 3,635,000 in 1961-62.

Some Marketed Farm Products

As many production supply cooperatives became successful in purchasing supplies, members requested help from them in marketing their farm products. These included grain, seeds, poultry and eggs, and livestock. Generally these services have been undertaken in areas where no other cooperative marketing services were available. As a result, some of the regional supply associations are now marketing certain commodities for members.

For example, Southern States Cooperative, Inc., Richmond, Va., now markets and processes eggs and grain. The Indiana Farm Bureau Cooperative Association, Inc., Indianapolis, and the Farm Bureau Cooperative Association, Inc., Columbus, Ohio, market grain for county member associations and their farmers. Agway, Inc., Syracuse, N.Y., markets eggs, poultry, beans, grain, hay, and fruits and vegetables at different points in its operating territory in the Northeast.

In 1961-62, about 25 percent of all associations that handled production supplies as their major activity also marketed one or more farm products.



Several regional associations now operate cooperative feed testing farms. This farm at Lexington, Ill., tests beef and swine feeds.

Handle Many Supplies

THIS section presents an overall picture of supplies that various types of cooperatives handle. It is based on annual information gathered by Farmer Cooperative Service. Detailed data by commodities were first obtained for 1950-51. Data for 1961-62 were the latest available for this bulletin.

Number

Some 6,982 cooperatives handled farm production and other supplies in 1961-62, compared with 7,409 in 1950-51. During this period, however, the number handling such items as fertilizer and pesticides increased substantially (table 15). States with the largest number of cooperatives handling supplies in 1961-62 were Minnesota with 930; Iowa, 536; Wisconsin, 446; North Dakota, 437; and Texas, 424.

The 6,982 cooperatives in 1961-62 provided supply services through perhaps 10,000 retail service outlets. These included an es-

timated 1,000 branches, 1,500 private dealers having franchises with regionals, and 500 car-door or farmer representatives.

Volume

Farmer cooperatives did a gross supply business of \$3.9 billion in 1961-62. After eliminating interassociation volume, such as wholesale to retail, the net business was about \$2.6 billion (table 15).

This 1961-62 figure compares with a gross of \$2.44 billion and a net volume of \$1.68 billion in 1950-51. Thus, net business increased 52 percent during the 11-year period. States with the largest net volume in 1961-62 were Iowa with \$187.8 million; Minnesota, \$166.5 million; New York, \$160.5 million; Illinois, \$141.3 million; and Wisconsin, \$136.3 million. The volume by geographic areas is shown in figure 10.

Feed, petroleum, and fertilizer accounted for about three-fourths

Table 15.—Number of cooperatives handling supplies and their net supply sales, by types, in 1950-51 and 1961-62

Item	Number of cooperatives handling each supply		Net sales (excludes intercooperative business)	
	1950-51	1961-62	1950-51	1961-62
			<i>Million dollars</i>	
Feed.....	4, 406	4, 395	694. 3	935. 6
Seed.....	3, 636	3, 900	90. 5	101. 0
Fertilizer.....	3, 352	4, 314	156. 1	387. 2
Petroleum.....	2, 677	2, 781	377. 0	624. 7
Pesticides ¹	1, 111	3, 095	22. 1	62. 3
Building materials ¹	790	1, 672	36. 4	95. 6
Farm machinery; other equipment.....	1, 872	1, 833	68. 0	75. 1
Containers ¹	921	1, 128	16. 1	28. 5
Meat and groceries ¹	859	878	34. 2	55. 1
Other supplies ²	4, 522	4, 578	189. 9	196. 2
Total.....	7, 409	6, 982	1, 684. 6	2, 561. 3

¹ Estimated from data obtained on these items in 1951-52. They were reported in "other supplies" in 1950-51.

² Includes twine, coal, tires, batteries, animal health products, farm hardware, and the like.

of the total cooperative sales of supplies in 1961-62 (fig. 11).

Of the 6,982 cooperatives handling supplies in 1961-62, about 3,206 were primarily production supply associations. Their net supply volume was \$1.88 billion, or 73 percent of the total. These associations reported about 3.6 million memberships, including some duplication where farmers were members of two or more cooperatives.

Another 3,776 marketing and service associations accounted for the other 27 percent, or \$680 million of cooperative net supply sales.

Proportion of Total

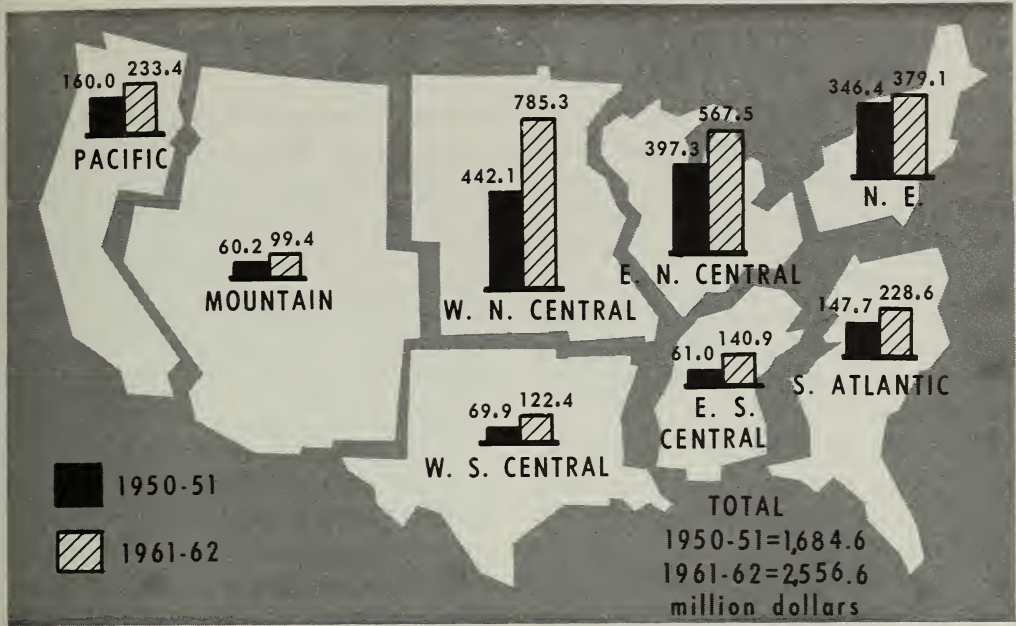
Farmers probably bought only 1 or 2 percent of their supplies through cooperatives before World War I. Now they obtain one-fifth of the major supplies and one-

seventh of all supplies and equipment they use in farming operations. The following tabulation indicates the proportion of specified supplies that farmers bought through cooperatives in 1961-62 compared with 1950-51.

Item	Percent of supplies farmers bought through cooperatives	
	1950-51	1961-62
Feed ¹	18. 5	17. 6
Seed.....	16. 6	18. 8
Fertilizer and lime.....	15. 1	25. 2
Petroleum.....	18. 6	24. 3
Pesticides.....	11. 4	18. 8
Total.....	17. 7	20. 1
Farm machinery and other equipment.....	1. 9	2. 1
All other supplies.....	10. 7	13. 9
All supplies.....	11. 9	14. 9

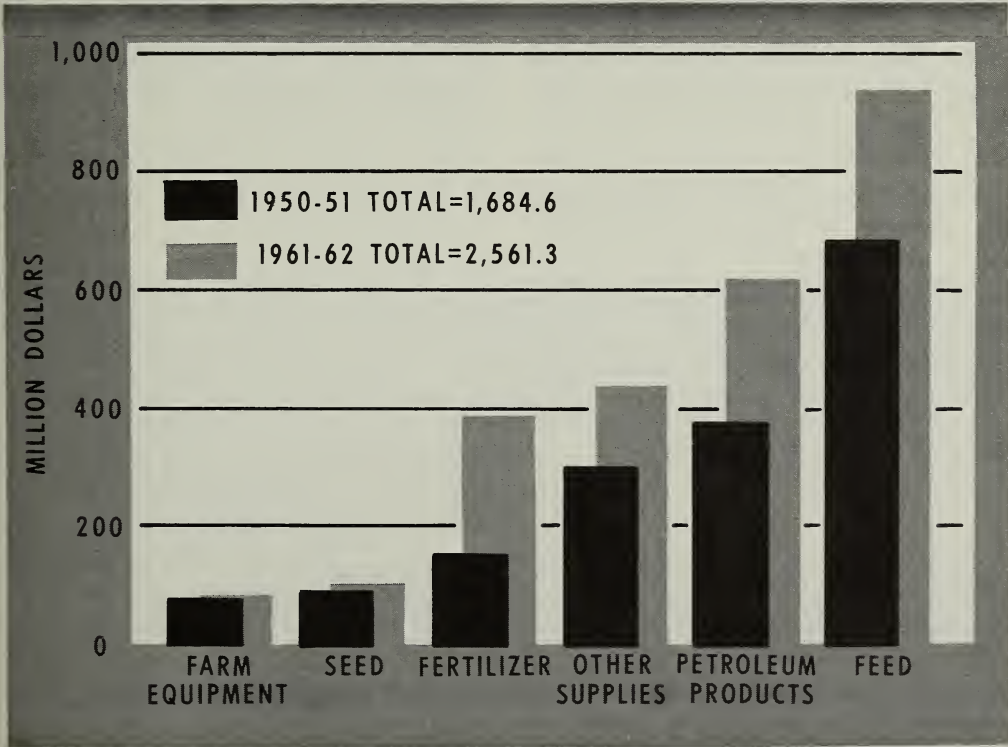
¹ Total expenditures include considerable purchases by one farmer from another through noncommercial channels.

Figure 10.—Net sales of farm production supplies by areas, 1950–51 and 1961–62.¹



¹ Excludes business between cooperatives.

Figure 11.—Net sales¹ of farm production supplies by major types, 1950–51 and 1961–62.²



¹ Excludes business between cooperatives.

² Includes Alaska and Hawaii.

Kinds of Supply Cooperatives

SUPPLY cooperatives range in size from the small local that serves a single community trading area to regionals that serve several States, and in scope from the local that handles a single product to those that make available to their farmer-members a wide variety of production supplies and services.

Locals

Local cooperatives serve a local or community trading area, an entire county, or parts of several counties. Some have branches in outlying areas. Their business usually is conducted at retail.

There were 3,087 local supply associations in 1961-62, located in practically all parts of the United States. The greatest density, however, was in the North Central States. Their net supply sales

were almost \$1.4 billion. Another 3,589 local marketing and service associations had a net retail supply business of some \$562 million. A total of 6,676 local cooperatives thus had net supply sales of \$1.9 billion in 1961-62, or 77 percent of the total, with regional cooperatives accounting for the remainder. Comparable volume in 1950-51 was \$1.3 billion.

Some local supply associations handle almost anything the farmer-member may need in his farming operations. Other associations handle only a single line of production supplies, such as petroleum products or fertilizer.

The trend among many local associations is to limit their lines to the basic production supply needs of farmers. Nevertheless, at the request of members, a number have

This local cooperative provides production supply services for farmers in the vicinity of Petersburg, Va.



added lines of home supplies such as household equipment or foods.

Regionals

Regional cooperatives are of three types:

1. Centralized associations, which retail supplies directly to farmer-members over several counties, one State, or several. An example is Agway, Inc. (formerly G.L.F. and Eastern States Farmers' Exchange). It serves farmers through branch service centers or warehouses, other dealers, and car-door distribution points handled by farmer-representatives.

2. Federated associations which wholesale or manufacture supplies for local cooperatives. An example is Pacific Supply Cooperative, Portland, Oreg., which serves 220 locals in three western States.

3. Combination associations that provide both retail and wholesale services. An example is Southern States Cooperative, Inc., Richmond, Va.

Volume varies greatly among regionals but is not the basis for classifying an association as a local or regional.

Most local supply associations have seen an advantage in holding membership in regional wholesale cooperatives and obtaining part or all of their supplies from them. Over the years, regional associations have expanded their operations and territories. They handle a large part of the production supply requirements of member cooperatives throughout the United States.

Regional wholesale associations

may serve both member and non-member local cooperatives. They provide management and financing services for some locals. They may also operate retail branches or subsidiary service stores. Several distribute supplies through other agencies or dealers in accordance with mutually agreeable policies.

Many of these service agencies are crossroad-type general stores that handle part or the full line of the regional, along with a large variety of commodities for general farm use. Their franchise includes provisions for passing on to farmers the wholesale patronage refunds distributed by the regionals.

A few regionals have farmer representatives or others who assemble orders for carlots of supplies and supervise their distribution upon arrival.

A total of 292 regional cooperatives had total gross supply sales in 1961-62 of \$1.68 billion and net sales of \$585.1 million, after excluding intercooperative business.³³ Their net sales thus accounted for about 23 percent of the total net supply business of all farmer cooperatives.

Of these regionals, 103 were mainly farm supply associations with gross supply sales of \$1.4 billion and net sales of \$464.3 million. The other 189 regionals were mainly marketing associations with gross supply sales of \$278 million and net sales of \$122.8 million.

The difference between these gross and net sales of all regionals

³³ Data for "regional cooperatives" and "national and specialized area cooperatives" as used in this publication must be added to correspond with data for "regionals" shown in other reports of Farmer Cooperative Service.

amounted to \$1.09 billion in 1961-62 and represented intercooperative business by 119 regional associations, which was mostly wholesale sales to retail cooperatives. This amount was equal to about 43 percent of total net supply sales of all cooperatives in 1961-62.

But if all locals had bought all their requirements from regional wholesale cooperatives, the wholesale value would have equaled only 67 to 70 percent of retail value because of transportation costs and retail markups the locals added.

Of the 295 regional cooperatives handling supplies in 1960-61, 126 had supply gross sales under \$100,000; 135 had sales of \$100,000 to \$9.9 million; 16 had sales of \$10 million to \$24.9 million; 10 had sales of \$25 million to \$49.9 million; 6 were in the \$50-million to \$99.9-million group; and 2 had supply sales of \$100 million to \$199.9 million.

Many smaller regionals specialize in a few types of supplies. A study of 135 regionals with less than \$10 million of supply business in 1960-61 showed that 36 percent handled only one item, and 24 percent handled only two major items. Slightly more than 10 percent handled as many as five major supply items.

In 1950-51, regional cooperatives sold about \$531 million worth of supplies to other cooperatives, which was equal to about 32 percent of the net supply sales that year. This indicates that local cooperatives obtained an increasing proportion of their supplies from regional wholesale cooperatives

during the 1950-51 to 1961-62 period.

Nationals and Those Serving Specialized Areas

Regional cooperatives, in turn, have found that they could improve their purchasing power and increase net margins by purchasing and manufacturing some supplies on a joint or cooperative basis. As a result, they have formed 16 national or specialized area associations.

These associations are federations of regionals in contrast to federations of locals. In four of the specialized associations, the controlling stock is held by one regional in each case. Each of these four, therefore, is a partially-owned subsidiary of the regional that holds its stock.

One of the national associations is United Cooperatives, Inc., Alliance, Ohio. It had a membership of 19 regionals and 12 associate nonvoting regionals in 1963. Until recently its members were all in the eastern half of the United States.

United owns one lubricating oil blending or compounding plant, an insecticide plant, a paint factory, and a barn-equipment assembling plant. It also handles building supplies, tires, batteries, hardware, steel products, and general farm and household equipment. These products are manufactured according to United's specifications under its "Unico" brand.

Another organization of this type, National Cooperatives, Inc., Albert Lea, Minn., had a membership of 28 regionals in 1963. Three or four were consumer supply co-

operatives. Four of the regionals are in Canada.

National Cooperatives, Inc., handles tires, batteries, household appliances, steel products, building supplies, and other items. It makes arrangements for much of this merchandise and food to be manufactured or packed according to the cooperative's specifications under the "CO-OP" label. It owns and operates a milking machine factory and a water-heater factory.

Most other federations of regionals are owned by from 5 to 10 associations. They manufacture one product on an area basis. Eight manufacture fertilizer—Central Farmers Fertilizer Company, Chicago, Ill., as an example. Two mill feed, Cooperative Mills, Inc., Baltimore, Md., being the

largest. Two deal in seed, and one—National Cooperative Refinery Association, McPherson, Kans.—produces and refines crude oil for four regionals in the Midwest.

The 14 national and special area cooperatives operating in 1961-62 had gross supply sales of \$262.3 million and net sales of \$4.4 million, compared with gross sales of \$111 million by 11 such organizations in 1950-51.

The combined supply business regional and national cooperatives did with other cooperatives was \$1.35 billion in 1961-62—equal to 53 percent of cooperative net sales. Such intercooperative supply business was \$642 million in 1950-51, or 38 percent of net sales.

Provide Integrated Supply Services

Cooperative purchasing of supplies over the last 100 years has evolved from simple to complex and diversified operations.

Cooperatives have integrated horizontally by adding branches and more products and services.

They also have made much progress in integrating vertically by performing more functions and services related to individual supplies. These include retailing, wholesaling, manufacturing, producing, and transporting.

Retailing

The earliest cooperative activity consisted of neighborhood pooling of orders for carlot purchases and bargaining for price concessions by farm organizations for their members.

The next step was the organization of local supply cooperatives with warehouses and managers. Local marketing associations also added supplies as a sideline service to members.

Some of these locals grew into centralized cooperatives serving farmers over a wide area through branch stations and private dealer-agents.

As mentioned, the 6,676 local cooperatives retailed \$1.97 billion of supplies in 1961-62. A total of 193 regional cooperatives retailed \$360.2 million of supplies.³⁴

The total retail volume of \$2.33 billion, therefore, made up most of

³⁴ 41 of these also wholesaled supplies.

the \$2.56 billion of net supply sales of all cooperatives, and farmers probably purchased 95 percent of this volume. As already mentioned, net supply sales of all cooperatives in 1950-51 were \$1.69 billion.

Associated with retailing are related services such as delivering, fertilizer spreading or applying, seed cleaning, equipment repairing, feed grinding and mixing, credit, and the like.

Wholesaling

As local cooperatives saw advantages in pooling their buying power, they set up regional wholesale cooperatives. These regionals at first confined their activities to purchasing members' requirements on a brokerage or commission basis. Then they gradually began purchasing supplies on contracts or on the open market and warehousing and distributing these supplies to the locals.

A total of 155 regional cooperatives wholesaled \$1.58 billion worth of supplies in 1961-62. (Forty-one of these also retailed some supplies.)

FCS studies indicated that retail cooperatives obtained about 95 percent of their liquid petroleum fuels through their wholesale cooperatives in 1957. They obtained about 72 percent of their formula feeds from such sources in 1959. They generally also obtain a high proportion of seed and fertilizer from wholesale cooperatives.

Wholesale cooperatives also provide other services for affiliated locals such as insurance, bonds, credit or financing, auditing, facility layout or engineering, economic research, and various forms of organizational, informational, or educational assistance.

Manufacturing

From time to time wholesale cooperatives found it expedient to manufacture more of their supplies. They saw opportunities to improve savings and quality and to provide more dependable sources for their locals. Shortages of certain supplies during World War II greatly stimulated manufacturing by cooperatives.

The principal items cooperatives manufacture are feed, fertilizer, and petroleum products. They also process large amounts of seeds. They manufacture small amounts of paint and small farm equipment; formulate some pesticides; and blend lubricating oil.

In 1957, regional cooperatives refined about 85 percent of the liquid petroleum fuels they wholesaled. In 1959, cooperatives manufactured about 90 percent of the formula feeds they retailed. (This was more than they wholesaled because many cooperatives manufactured and retailed feed direct to farmers.)

Most of the manufacturing, refining, processing, and blending is done by regionals who then wholesale the supplies to their locals or retail them to farmers. FCS has not obtained data on the quantity or value of the supplies they manufacture except for feed and petroleum. As previously mentioned, however, a number of the larger regionals have formed 16 separate national and area cooperatives to perform specialized buying and manufacturing services.

Before 1933, cooperatives often were limited in their manufacturing activities by lack of capital. It was difficult for them to borrow

money in sufficient amounts to finance the construction and operation of such enterprises. In 1933, capital became available to eligible farmer cooperatives from the banks for cooperatives supervised by the Farm Credit Administration. Since then, many cooperatives have been assisted in providing processing services for farmer-members.

In more recent years, farmers have made substantial direct investments in both their local and regional associations. Many also have converted patronage refunds into member capital for use by their cooperatives under revolving capital programs. Savings from manufacturing have generally exceeded savings from wholesale distribution in most farm supply operations.

Producing

A few regional cooperatives have moved into the field of basic supply sources by producing some of their requirements. Some contract with growers to produce seed stocks under specifications. A few own poultry breeding farms and others contract with growers to produce hatching eggs for broilers. Several regionals have acquired oil wells to insure a supply of crude oil for their refineries and to spread their

risks and opportunities for savings. Cooperatives produced about 13 percent of the total oil products they refined in 1959. A national cooperative leased western deposits from which it mined phosphate rock, but discontinued such operations in 1964. It has acquired stock in a potash mining company.

Several regional cooperatives formed a national seed research association in 1961 to develop or breed better seeds for forage crops.

Transporting

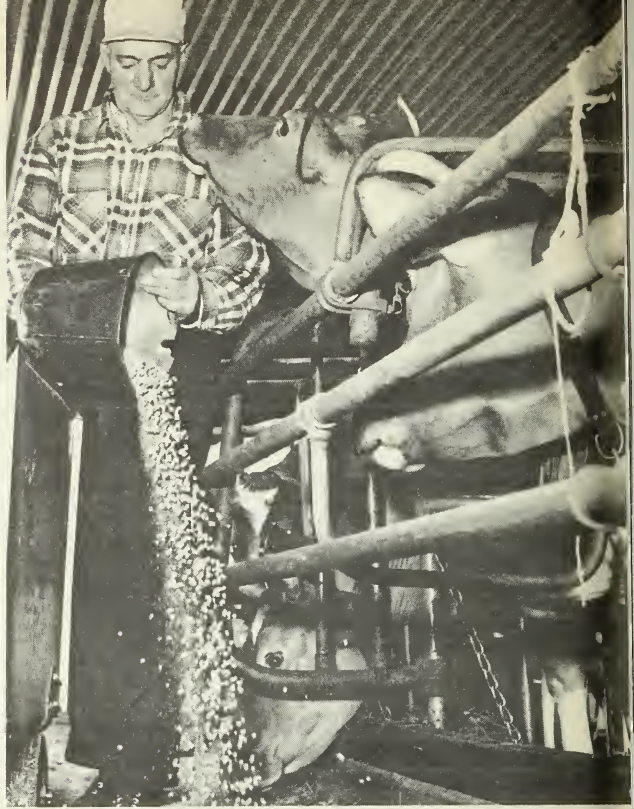
Cooperatives have added transportation services for each of the integrated levels discussed. Locals operate many retail petroleum tank trucks, bulk feed trucks, and fertilizer spreading trucks. Regionals have large dry-freight vans, highway liquid fuel transports, crude oil and product pipelines, barges and towboats, and three tankers. In the petroleum business, transportation is one of the major integrated operations.

Examples of cooperatives that have made significant progress in vertically integrating their farm production supply operations are Consumers Cooperative Association, Kansas City, Mo., and Indiana Farm Bureau Cooperative Association, Inc., Indianapolis.

Feed Accounts for Largest Volume

FARMERS buy many different kinds of supplies through their production supply cooperatives. These include feed, petroleum products, fertilizer, seed, farm machinery and general farm equipment, and miscellaneous items (fig. 11).

More cooperatives handle feed than any other commodity, and it is their largest volume item. In 1961-62, a total of 4,395 associations reported gross feed sales of about \$1.3 billion, and net sales, after excluding intercooperative



Much feed is now made in cooperative mills (above left) and moved in cooperative trucks (below) directly to the dairy, livestock, and poultry farms of member-owners. The cow (upper right) was the ultimate consumer of this cooperatively milled, mixed, and distributed feed.



business, of \$935.6 million. In 1950-51, cooperatives had gross feed sales of \$910 million and net sales of \$694 million. Thus, net volume increased 35 percent during the 11-year period.

States leading in cooperative net sales of feed in 1961-62 were New York with \$100.7 million, California with \$67.3 million, Iowa with \$62.9 million, Pennsylvania with \$53.2 million, and Missouri with \$48.8 million.

Feed accounted for 36 percent of the total supplies all cooperatives in the country sold that year.

Intercooperative sales (gross minus net business) of feed in 1961-62 by 65 associations, were about \$345.7 million, or 37 percent of net sales. This compared with \$216 million, or 31 percent of net sales for 1950-51. Intercooperative volume was a relatively small percentage of net sales because many associations manufactured feed and retailed it directly to farmers rather than wholesaling it to other associations.

Bureau of Census figures indicated that in 1961 commercial production of formula feeds exceeded 34 million tons, worth over \$2.5 billion. Production of supplements and concentrates totaled 6.7 million tons. Cooperatives probably handled between 18 and 19 percent of these two types of feeds, or about 7.5 million tons.

Mixed Feed Operations

The mixed feed industry had a sketchy beginning in the 1880's. Not until after the turn of the century did it begin to assume importance. Rapid growth then set in. As often occurs with new

and expanding industries, many abuses developed. Formulas were jealously guarded, extravagant claims were made as to the virtues of the product, margins were wide, and quality was uncertain.

During and following World War I, farmer cooperatives were formed which at first merely bought feed wholesale. The next step was to have feed mixed for them under contract.

When this proved unsatisfactory, it became evident that it would be necessary to control the operations. Cooperatives purchased feed mills and began producing feeds under open formula or public formula—an idea promulgated by a member of Cornell University's staff.

The mill at Buffalo, N.Y., of Agway, Inc. (formerly owned by Eastern States Farmers' Exchange, Inc.) is one of the largest in the world. This mill can turn out around 800,000 tons of feed a year. It is supplemented by another large mill at Huron, Ohio.

In the Midwest, Farm Bureau regional cooperatives in Indiana, Ohio, Michigan, and Wisconsin formed the Farm Bureau Milling Co., Hammond, Ind., and had feed mixed under contract. A representative was maintained at the mill to check constantly on ingredient prices, quality, and mixing operations. Nevertheless, member cooperatives finally decided that the only real answer was for the Farm Bureau Milling Co. to own and operate a mill.

The M.F.A. Milling Co., Springfield, Mo., formed by local exchanges of the Missouri Farmers Association, began mixing feed with scoop shovels in 1923. In 1929, it purchased a mill that soon had to be enlarged to keep up with

the demand. Later it obtained a second feed mill.

In the Far West, several poultry and egg and dairy marketing cooperatives decided in their early days that providing feed for their members would be a worthwhile service. Their original purpose was to combine sufficient volume so that they could ship eggs or poultry to the eastern markets advantageously.

As population on the West Coast increased, the egg market changed from an export to an import basis. Many members then developed premium local markets for their eggs. Under these conditions, several associations soon found that the dollar volume of their feed business far exceeded the volume of poultry and eggs. Most of them added other production supplies.

During World War II, many cooperatives—depending upon outside sources for their feed supply—found quality deteriorating or had their contracts canceled. They were forced to provide their own milling facilities before they were really ready. Many mills were built, however, with the net result that cooperatives were in a much better position to serve farmers by supplying quality feed at reasonable prices.

In the last 10 to 15 years, cooperatives have made much progress in remodeling existing mills and in building new “push-button” mills. A number of large automated mills were built in deficit feed areas, and many grain marketing associations added small- to medium-size mills for custom and formula feed services in surplus grain areas.

An important development has been the cooperative efforts of regional supply associations in the

East and South. They formed Cooperative Mills, Inc., Baltimore, Md., which now provides management and research services for 10 mills owned individually or jointly by 6 regional associations.

A Farmer Cooperative Service study in 1959 showed that 821 cooperatives with 1,054 mills made some formula feeds. Only 165 of these mills, however, produced over 5,000 tons and had a larger formula feed volume for sale than a custom volume, and therefore, could be regarded primarily as formula feed mills. Seventeen of these mills produced almost half of the 6.2 million tons milled by the 165.

Cooperatives located throughout the country also custom ground and mixed about 6 million tons of feed through 2,786 stationary facilities and 122 mobile facilities in 1959.

Bulk delivery of feed to farms has made rapid strides—accounting for about 46 percent of all feed distributed in 1959. Several associations now deliver practically all feeds in bulk. Cooperatives added a number of bulk transfer or relay stations to provide bulk services over a wider area.

Integrated Operations

An FCS study showed that cooperatives had integrated their feed operations to the following extent in 1959:

1. They retailed 12 million tons of feed and delivered 47 percent of this with their own trucks.
2. Retail associations obtained 72 percent of the feed they bought through wholesale cooperatives.
3. Cooperatives manufactured 90 percent of the formula feed they retailed.



Numerous feed service centers recently have been built in the Midwest similar to this Oskaloosa, Kans., branch of the Jefferson County Cooperative Association, Valley Forge, Kans.

4. They financed about 20 percent of the feed they retailed.

A number of cooperatives have endeavored to maintain feed volume and help farmers retain a voice in poultry production and marketing by providing feed financing and contracting services. In 1959, they financed \$41 million of feed on a secured term basis and provided \$54 million worth under contract programs.

The science of animal nutrition has made great advances in recent

years. Cooperatives have worked closely with State agricultural experiment stations and endeavored to provide members with the best feeds possible.

Recently, 17 regional cooperatives took a significant step by cooperatively establishing 6 feed research farms. Individual regionals own the farms; and the testing and research operations for turkey, layer, broiler, dairy, and swine and beef feeds are supervised by Cooperative Mills, Inc., Baltimore, Md.

Petroleum Sales Increase With Mechanization

WITH the shift to mechanized agriculture during the past quarter of a century, farmers found it to their advantage to form cooperatives for purchasing petroleum

products. The main objective was to effect savings and thus reduce production costs.

Petroleum now ranks second in dollar volume and accounts for

about 25 percent of farmer cooperatives' total supply sales. During 1961-62, about 2,781 cooperatives had petroleum gross sales of \$996 million and net sales of \$624.7 million. Gross and net sales in 1950-51 were \$585 million and \$377 million, respectively. Thus, net volume increased 66 percent during the period. Farmers now buy about 24 percent of their petroleum needs for production operations through their cooperatives.

Leading States with net cooperative sales were: Iowa, \$62.5 million; Minnesota, \$58.4 million; Illinois, \$52.4 million; Wisconsin, \$45.2 million; and Kansas, \$44.9 million.

Intercooperative sales of petroleum in 1950-51, by 47 associations, were \$208 million, or 55 percent of net sales that year. In 1961-62, such sales by 46 associations were \$371.6 million, or 60 percent of net sales. These figures reflect retail cooperatives' increased purchases through their wholesale associations and other transactions between cooperatives.

Retail

Farmers first organized local petroleum cooperatives in Colorado, Minnesota, Kansas, and other Midwestern States as tractors began to come into extensive use in the early 1920's. By 1957, the latest year detailed data were available, about 2,336 local associations were delivering liquid fuels to farms. They had more than 2,780 bulk plants and employed 5,685 tank-truck servicemen. They operated about 1,965 service stations, most of which were located in small rural towns.

More than 700 associations also distributed liquefied petroleum gas

by tank truck in 1957. With the increased use of fuel oil for home heating in recent years, many cooperatives have expanded operations to include this service for members.

During 1957, cooperatives supplied about a million farms with some 1.96 billion gallons of fuels. This figure represented approximately 20 percent of the total petroleum liquid fuels used on farms in the United States. This volume, however, was equal to only 2.2 percent of the total domestic consumption of refined fuels in the United States. Estimates indicate farmers bought 24 percent of their liquid fuels through cooperatives in 1961-62.

Some cooperatives handling petroleum products are separate petroleum associations; some are general supply cooperatives with petroleum departments; and many are marketing cooperatives with petroleum departments.

Local cooperatives usually own the bulk plant or station facilities. About half the associations own the delivery trucks and employ servicemen on a salary or a salary plus a commission or bonus. The other half own only the tanks for the trucks and employ, on a commission basis, servicemen who own their truck chassis.

The general practice of retail cooperatives is to sell petroleum products at normal or going prices in their communities. They then declare patronage refunds from net savings or proceeds at the end of the year.

Wholesale

Local cooperatives soon saw the need for pooling their purchases.

In 1926, the first strictly petroleum regional wholesale cooperative began operating at Minneapolis, Minn.

By 1957, 30 regional associations were performing wholesale services for approximately 90 percent of the local oil cooperatives in the country. Four of these also had some retail operations.

To better serve their locals, many acquired highway motor transports. A few obtained storage terminals and lubricating oil blending or compounding plants. In 1957, cooperatives owned 10 blending plants and 20 storage terminals in addition to those at their refineries.

Refine

The regional cooperatives began purchasing refined fuels from independent companies, first on a brokerage basis and later on a purchase-and-sale basis. In 1939, two regionals began building small refineries to effect savings for farmers and to better integrate operations. By 1950, 14 regionals owned a total of 20 plants with crude oil

distillation capacity of about 145,000 barrels a day.

In 1957, however, 11 plants with a capacity of 155,000 barrels a day—or 1.6 percent of the United States total—were in operation. By early 1954, one more plant had been sold.

The regionals had acquired most of these refineries primarily to assure dependable supplies of fuel for farmers at reasonable prices in the periods of short supplies during and after World War II.

Since then, cooperatives found it necessary to either modernize refineries by adding catalytic cracking equipment to improve their efficiency and the quality of fuel, or to dispose of them. Since this required enlarging the smaller plants, cooperatives sold most of them.

Produce

Shortly after cooperatives acquired refineries, they found it necessary to produce crude oil to insure their supply. By 1957, 12 regionals owned 1,691 oil wells. They also held under lease considerable acreages of productive

Thousands of farmers and their local cooperatives produce their fuel in this Laurel, Mont., refinery of Farmers Union Central Exchange, St. Paul, Minn.





L. P. gas service is provided by many countywide cooperatives affiliated with F S Services, Inc., Bloomington, Ill.

and prospective oil lands. Their net production of crude oil was only about 17,340 barrels a day—the equivalent of 12.5 percent of the crude oil processed in their refineries. They also controlled, or had first access to, about an equal amount.

Transport

Because transportation is an important phase of petroleum operations, cooperatives soon acquired tank trucks for delivering fuel to farms and highway transports for moving fuel from terminals to local bulk plants. Two purchased tow boats and barges for moving fuel from their refineries to water terminals. Several with refineries purchased crude oil gathering pipelines, and two acquired pipelines for moving refined products from refineries to trade territories.

Leading wholesaling and refining cooperatives are Consumers Cooperative Association, Kansas City, Mo.; Indiana Farm Bureau Cooperative Association, Inc., Indianapolis; Farmers Union Central Exchange, Inc., St. Paul, Minn.; and Midland Cooperatives, Inc., Minneapolis, Minn. National Cooperative Refinery Association, McPherson, Kans., is owned by five regionals.

Cooperatives, therefore, have made progress in integrating their petroleum operations. They obtain about 95 percent of their retail volume from wholesale cooperatives; refine about 85 percent of their wholesale volume; but produce crude oil for only 12.5 percent of their refinery requirements. They also transport, with their own equipment, most of their retail

volume, one-half of their wholesale gallonage, and one-half of the crude oil going into their refineries.

In recent years, cooperatives have increased their local distribution of fuels, especially in home heating products. Sharpest increases have occurred in liquefied petroleum gas. They have improved delivery efficiency with use of better equipment, compensation methods, and routing systems. Cooperatives in Michigan have developed a substantial volume of direct deliveries from terminals to larger farms.

Over the years, farmers have made substantial savings in their

fuel and lubricant costs through these local and regional petroleum associations. Cooperatives have helped, also, to provide dependable sources of fuel, particularly during war periods when farmers were meeting increased demands for food and fiber. And many have developed systems for efficiently serving all farmers in their area, regardless of size.

The modern farmer, through his cooperatives, is producing and refining petroleum products needed in his daily farming operations, just as he formerly produced feed for his horse and for his mule power.

Emphasize High-Analysis Fertilizers

FERTILIZER manufacturing and distribution is another important service of cooperatives. Early efforts can be traced to occasional car-door distribution before World War I. Since that time, fertilizer distribution has grown until it ranks third in supply sales of farmer cooperatives—constituting 15 percent of the total in 1961-62.

Sales

Farmers purchased \$387.2 million worth of fertilizer and lime through 4,314 cooperatives during 1961-62. This represented about 25 percent of total fertilizer expenditures by all farmers that year. In 1950-51, cooperatives' net fertilizer and lime sales were \$156 million, or about 15 percent of the total bought by all farmers.

Cooperative fertilizer net sales thus increased about 148 percent during the 11-year period. The largest tonnage increases occurred in the East North Central and the West North Central areas, but the

largest percentage increases occurred in the West North Central and Mountain areas.

Leading States in cooperative fertilizer and lime net sales in 1961-62 were: Mississippi, \$28.8 million; Illinois, \$26.7 million; Iowa, \$24.5 million; Minnesota, \$21.3 million; and Indiana with \$20.2 million.

Gross sales were \$682 million in 1961-62 and \$261 million in 1950-51. Intercooperative business by 67 associations was \$295.2 million, or 76 percent of net volume, in 1961-62. Such transactions totaled \$105 million in 1950-51, or 67 percent of net sales.

Recent Developments

In mid-1963, farmer cooperatives operated about 112 fertilizer mixing and manufacturing plants, exclusive of local bulk blending and liquid distribution or mixing plants. One large nitrogen plant also was under construction. These facilities consisted of about 9 com-

plete plants; 29 superphosphate and mixing; 35 ammoniation and mixing; 31 dry mixing; and 8 nitrogen plants. Some also had anhydrous converters for making aqua ammonia solutions.

Of these plants, one produced elemental phosphorus; two, concentrated superphosphate; three, diammonium phosphate; five, phosphoric acid; four, nitric acid; and three, urea.

Central Farmers Fertilizer Co., Chicago—formed by 25 regional cooperatives—mined phosphate rock and manufactured it into elemental phosphorus, phosphoric acid, and triple superphosphate at Georgetown, Idaho, for a while but discontinued this operation in 1964. It also has an interest in, and distributes the output of, a potash company.

Mississippi Chemical Corporation, Yazoo City, pioneered among cooperatives in manufacturing anhydrous ammonia and ammonium nitrate. It also manufactures urea and phosphate acid for use in its operations. Although nitrogen plants require heavy investments, net savings for farmers have been large—even with declines in general price levels in the areas of the plants.

Farmer cooperatives manufactured about 12 percent of all fertilizer mixtures and materials reported by manufacturers in 1951–52, but later data are not available.

In mid-1963, cooperative nitrogen and urea plant capacity was 8 percent of the total; capacity of cooperative solid ammonium nitrate plants was 19 percent of the total; and that of cooperative elemental phosphorus plants was 4 percent of the total.

Besides the manufacture of nitrogen fertilizers, other important developments among cooperatives in the last 10 to 12 years were:

1. Bulk blending of basic fertilizer ingredients has become important in the central part of the United States—especially in Missouri, Illinois, Minnesota, and Wisconsin. Using soil tests as the basis, cooperative plants blend fertilizers according to specifications and then usually spread the materials directly on the land.

2. Distribution of liquid fertilizers has developed rapidly in the southern central and western sections of the country. Many local cooperatives operate plants from which the liquids are custom applied. Both bulk blending and liquid distribution eliminate drying, curing, granulation, use of fillers, and bagging.

3. Production of fertilizer in granulated form has increased—especially in the South.

4. Bulk spreading of lime and fertilizer on a custom basis increased throughout the country. Some cooperatives now use trucks equipped to apply both dry and liquid materials.

Cooperatives have made a number of important contributions to farmers in distributing fertilizer. As a general rule, these organizations have been in the forefront in formulating high-analysis fertilizer. Their fertilizers often have contained from two to three more units of plant nutrients per ton than those of other distributors.

Cooperative operations have been responsible to some extent for the increase in total plant nutrients of all mixed fertilizer production in the United States—from 24 percent in 1950 to 31.5 percent in 1960.



Farmer members of Mississippi Chemical Corporation, Yazoo City, pioneered in 1948 in manufacturing their own nitrogen fertilizers.

Sixteen freight rate increases from 1946 to mid-1962 contributed to an average increase of about 119 percent in rail transportation costs for fertilizer ingredients. Estimates indicate that transportation costs, both in and out, in 1961-62

averaged from \$18 to \$21 a ton on most fertilizers.

Thus, where cooperatives have stepped up the units of plant food nutrients per ton, this has helped them offset their increased hauling costs.

Handle Seed Adapted to Area

SEED is an important item in farmers' supply needs from cooperatives, even though dollar sales are relatively small.

Sales

About 3,900 associations in 1961-62 had net sales of \$101 million, compared with \$90 million in 1950-51—an increase of 12 percent. Cooperatives handled about 19 percent of all seed farmers bought in 1961-62, compared with 16.6 percent 11 years earlier.

Leading States in net seed sales in 1960-61 were Iowa, \$6.5 million;

Illinois, \$6.4 million; Ohio, \$5.9 million; Missouri, \$5.7 million; and Minnesota, \$5.5 million.

Gross sales of seed were \$143 million in 1961-62 and \$123 million in 1950-51. Intercooperative sales by 46 associations were \$42 million—or 42 percent of net sales in 1961-62—compared with \$33 million—or 37 percent of net sales—11 years earlier.

Volume of such business is relatively low because retail cooperatives buy much of their seed from local farmers and from various seed companies.

Recent Developments

Several associations specialize in wholesale seed distribution, but generally seed is handled along with other production supplies. Demand for seed is, of course, seasonal. Thus, seed fits in well as part of a diversified operation rather than as the sole product handled.

Most of the wholesale and many of the local retail cooperatives clean, grade, blend, and treat seed. Others merely buy seed processed, packaged, and ready for distribution.

The farmer's stake in seed quality is most important. His yields are greatly affected by the seed he plants. Yet there are few supplies in which quality is so difficult to judge from appearance. Many cooperatives early discarded the "seedman's disclaimer" and stand squarely behind the seed they handle.

Testing for Adaptability

What is now Southern States Cooperative, Inc., started in 1923 as Virginia Seed Service, Inc. It organized for two reasons. Members of the Virginia Crop Improvement Association had worked hard to develop and produce superior strains of seed adapted to Virginia conditions and certified as to origin. Since these factors were not recognized by the seed trade at that time, producers were forced to organize their own marketing machinery.

In addition, the Virginia Experiment Station had shown that farmers had difficulty establishing and maintaining good stands of clover and alfalfa because seeds imported from other regions were not adapted

to Virginia conditions and were susceptible to diseases that soon curbed the growth of the plants.

Farmers were interested in knowing the origin and adaptability of seed, but there was no difference in the appearance of adapted and unadapted seed. This was an added reason for them to form their own cooperative. Through operating such an agency they could be sure the seed they bought would flourish on their Virginia farms.

Carefully selected seed necessarily sold at premium prices. It took time to convince farmers that they could get dependable seed through their cooperative and that such seed would far more than repay the premium price. After a slow start, however, the idea took hold.

Agway, Inc., Syracuse, N.Y. (formerly Eastern States and G.L.F.) is a good example of a cooperative that buys field crop, grass, legume, and vegetable seeds for its members. It also contracts with growers for the production of some vegetable seed.

Agway, Inc., operates an extensive test farm to find the actual value-in-use of various varieties and strains under conditions existing in its territory. Then it advises members as to weak and strong points of recommended varieties and refuses to deal in those not worthy of recommendation.

In its seed potato program, this association carefully tests varieties and strains for yield and other characteristics. Each year it sends samples from every lot of seed potatoes to Florida and grows them there during the winter. If tuber-born disease shows up, the seed testers take the lot from which the sample came and dispose of it

as table stock. Starting their crop from this disease-free seed stock has helped the farmers of New England to increase their potato yields greatly.

Procurement

There have been some recent significant developments in cooperative procurement of seed. In a few States, cooperatives have been set up to handle foundation seed stocks. For example, Pennsylvania Foundation Seed Cooperative, Jersey Shore, now receives all new varieties of hybrid corn and small grains produced by the University research program.

This association has a modern seed cleaning and storage plant, as well as a nursery for multiplying lines and crosses for production of certified hybrid seed corn.

It contracts with farmers to produce foundation seed stock and then distributes it to growers' seed houses and cooperatives for the production of registered and certified planting seed.

Indiana Farm Bureau Cooperative Association, Inc., Indianapolis, arranges for much of its seed from California to be shipped direct to its county retail associations, thus bypassing the wholesale warehouse.

Similarly, Agway, Inc., arranges for direct shipments of seed from western processors to branch warehouses and affiliated service stores and service agencies in the Northeast.

A unique program between Cal-Approved Seed Growers Association, Modesto, Calif., and several wholesale purchasing and distribution cooperatives in the Midwest and the East was developed about 1959.



Bulk handling of seed is a service many cooperatives now have available for their members.

Under this program, the wholesale distribution cooperatives indicate the amount of legume seed, by varieties, needed for distribution to their local retail cooperatives.

The grower marketing cooperative accepts an advance payment from the distribution cooperatives and furnishes the seed. Final settlement is made after the seed season, based on the average selling price by the distributing cooperatives, with proceeds shared between the marketing and purchasing cooperatives on an agreed-upon formula.

Research

Early in 1960, three large eastern regional cooperatives set up a cooperative corn research project. They combined their efforts in

breeding and evaluating corn hybrids for farmers in a 10-State area in the Northeast.

Another significant development in seed research was the formation of Farmers Forage Research Cooperative, headquartered in Madison, Wis. Members are 8 regional wholesale cooperatives in the Midwest and the East and one regional marketing association in the West.

Objective of this organization is to foster and provide seed research and varietal development of forage for the benefit of farmers. It re-

cently began operating a seed research farm in Indiana.

Some cooperatives are expanding their facilities for handling seed in bulk to reduce merchandising costs and to meet needs of seed producers. Availability of a suitable market for screenings and programs for preventing accidental mixtures of seed are essentials for the success of such operations. One large regional emphasizes the desirability of placing seeds in consumer containers as soon as possible after they have obtained the seed stock.

Handle Other Supplies and Equipment

IN addition to the four basic or major volume supplies discussed, cooperatives handle a long list of other items used in farming and in the farm home.

The number of items has been increasing—dictated by the desires of members and opportunities for savings or better service. Because methods of itemizing sales vary among cooperatives, a limited volume in the categories discussed in this section may be included in “general farm supplies.”

Building Materials

Some 1,672 cooperatives reported \$143 million gross sales and \$95.6 million net sales of building materials in 1961–62. Dollar volume for 1950–51 were approximately \$67.3 million and \$36.4 million, respectively. Cooperative net sales thus increased 163 percent during the 11-year period, but were only about 6 percent of farmers’ total expenditures for building supplies in 1961–62.

Principal items handled were lumber; millwork; metal, aluminum, and asbestos roofing and siding; fencing; wire; and paint. Some cooperatives, however, may include the latter two items with hardware under “general farm supplies.”

Leading States in net sales in 1961–62 were: Iowa, \$16.9 million; Indiana, \$11.2 million; California, \$6.8 million; Illinois, \$5.1 million; and South Dakota, \$5.1 million.

Intercooperative business by 33 associations was \$47.7 million in 1960–61—or 49 percent of net sales—compared with \$30.9 million in 1950–51—or 85 percent of net business. The percentage was higher 11 years earlier because of lumber sold through other-than-cooperative outlets.

Several regionals bought lumber mills in the period of shortages during World War II in order to obtain supplies needed by member cooperatives. These were sold as supplies became more readily available.



Farmers now obtain a variety of supplies from cooperatives. This is the Auburn, Wash., branch store of Western Farmers Association, Seattle.

The largest percentage of associations handling building material were in the North Central States. Most cooperatives with regular lumber yards are in Iowa, Indiana, Ohio, and the Dakotas. Many grain elevators handle building materials as one of their sidelines.

Cooperatives in Indiana and Pennsylvania and in several other areas recently began providing a building and automation service for farmers. This involves planning and estimating, instructing farmers as to construction, recommending builders, or arranging for a contract with a cooperative's erection crew for a completely finished building.

Principal regional associations handling building supplies are Farm Bureau Cooperative Association, Columbus, Ohio; Indiana

Farm Bureau Cooperative Association, Indianapolis; Consumers Cooperative Association, Kansas City, Mo.; Fruit Growers Supply Co., Los Angeles, Calif.; and Great Plains Supply Co., St. Paul, Minn.—an affiliate of Farmers Union Grain Terminal Association.

United Cooperatives, Inc., Alliance, Ohio, also manufactures paint and provides such items as laminated rafters. Only Fruit Growers Supply Co. has extensive holdings of timber and operates two lumber mills. These originally were acquired for manufacturing box shooks for Sunkist citrus marketing operations.

Farm Machinery and Other Equipment

During 1961-62, about 1,833 cooperatives reported distributing

\$75.1 million worth of farm machinery and other equipment such as milking machines, water systems, sprayers, and the like. This was only 10 percent above the \$68 million reported by 1,872 cooperatives in 1950-51.

Cooperatives handled only about 2 percent of all farm machinery, motor vehicles, and other equipment purchased by farmers in 1961-62. Cooperatives, with a few exceptions, did not handle automobiles and trucks.

Leading States with cooperative farm machinery and other equipment net sales were: Wisconsin, \$6.3 million; New York, \$5.8 million; Ohio, \$5.7 million; Indiana, \$5.7 million; and Minnesota, \$5.3 million. Gross cooperative sales of such items were \$105 million in 1960-61 and \$107 million in 1950-51. Intercooperative sales by 27 associations in 1961-62 were about \$30.3 million—or 40 percent of net sales—compared with \$39 million—or 57 percent of net volume 11 years earlier. This reflects the discontinuance of farm machinery operations by wholesale cooperatives.

About 1,000 cooperatives handled tractors and farm machinery in the early 1950's, but a number did not carry a full line and maintain a complete stock of repair parts and a service shop. In recent years, however, the number of local associations handling a manufacturer's full line of tractors and machinery has been declining.

Farm machinery has been one of the most difficult items for farmer cooperatives to handle successfully. Local associations have the problems of trade ins, reconditioning and selling used equipment, servic-

ing and repairing, and financing or credit extension and collection. Too many have undertaken this service before they were adequately financed. Many have not set up separate departments with specialized personnel properly trained in this type of business.

Regional cooperatives have attempted to manufacture farm machinery since the 1930's. For many years, 13 regionals owned National Farm Machinery Cooperative, which operated a general farm implement factory at Bellevue, Ohio, and a corn picker and manure spreader plant at Shelbyville, Ind. National Farm Machinery Cooperative also contracted with a Canadian firm to manufacture "CO-OP" tractors for several years.

Difficulties arose, however, in the need to modernize plants, in raising adequate capital, in maintaining adequate volume from regionals and their locals, and, finally, in management weaknesses.

The organization ceased operations in 1953 and disposed of the plants to the Canadian firm which had been manufacturing its tractors. The wholesale cooperatives obtained equipment from this company for a period but have now discontinued machinery wholesaling. Their locals deal direct with manufacturers.

The Farmers Union Central Exchange, St. Paul, Minn., operated an assembly plant for a large "CO-OP" tractor for a few years. It discontinued operations, however, when machinery became readily available after the recent war periods.

Probably all of the 1,839 associations carry general farm equipment, and many others may report such sales as "general" or "other

farm supplies" in their statements. Such equipment includes dairy and poultry (barn and feeding) equipment, milking machines, water and irrigation systems, sprayers and dusters, lawn mowers, petroleum tanks for farmers, and the like.

Regional cooperatives obtain miscellaneous farm equipment from various sources. A number get some of their needs through United Cooperatives, Inc., Alliance, Ohio, and National Cooperatives, Inc., Albert Lea, Minn. The former operates a barn-equipment assembly plant, and the latter owns a milking machine factory.

Indiana Farm Bureau Cooperative Association, Inc., Indianapolis, has a small hog-equipment manufacturing plant at Windfall, Ind. Consumers Cooperative Association, Kansas City, Mo., operates a grain bin and bulk feed tank equipment plant at Hutchinson, Kans.; and Mississippi Federated Cooperatives, Jackson, manufactures a small volume of liquid fertilizer equipment and sprayers, hog feeders, and bulk feed bins at Macon, Miss.

Containers

About 1,128 cooperatives reported gross sales of \$60.1 million and net sales of \$28.5 million of containers and packaging supplies in 1961-62. This compares with gross sales of \$41.4 million and net sales of \$16.1 million, respectively, in 1950-51.

Intercooperative business of \$31.6 million by 32 wholesale cooperatives in 1961-62 and \$25.3 million in 1950-51, exceeded net sales each year because the local cooperative fruit and vegetable packinghouses used the containers they bought

from wholesale cooperatives for their own marketing operations. Net sales consisted mostly of shipping and field boxes and bulk bins to growers and other firms.

Gross sales increased 45 percent during the 11-year period.

States with the largest cooperative gross sales in 1961-62 were: California, \$18.1 million; Texas, \$9.6 million; Florida, \$6.3 million; Washington, \$5.9 million; and Minnesota, \$2 million.

The principal regional wholesale cooperatives handling containers and other packaging supplies are:

1. *Fruit Growers Supply Co., Los Angeles*, supplies affiliated local Sunkist exchanges. For many years it has operated three lumber and box-shook manufacturing plants and several thousand acres of timberland.

With the conversion to fiberboard boxes, Fruit Growers Supply Co. began buying such containers from manufacturers. Recently it built a carton fabricating plant and arranged for a major supplier, with an adjoining corrugating plant, to operate it.

2. *Northwest Wholesale, Inc., Wenatchee, Wash.*, supplies local apple marketing cooperatives. It operated a box-shook plant for several years but later arranged for a container company to assemble fiberboard boxes in Northwest's building at Wenatchee.

3. *Highland Crate Co., Jacksonville, Fla.*, operates a wire-bound box manufacturing plant to supply local citrus marketing associations in Florida.

4. *Exchange and Supply Cooperative, Tampa, Fla.*, provides a wholesale service for containers and other supplies needed by local marketing cooperatives in the State.

5. *Maine Potato Growers, Inc., Presque Isle*, owns and operates the Maine Potato Bag Co. This plant manufactures both textile and paper bags to supply a large part of the needs of members.

Pesticides

The number of cooperatives handling insecticides, fungicides, weedicides, rodenticides, herbicides, and the like increased from about 1,100 in 1950-51 to 3,095 in 1961-62.

Sales of these supplies likewise increased from a gross of \$30.7 million and a net of \$22.1 million in 1950-51, to a gross of \$92.1 million and a net of \$62.3 million in 1961-62. This was an increase of 182 percent in net volume.

Cooperatives handled about 19 percent of all pesticides bought by farmers in the latter year.

States with highest net cooperative sales in the latest year were: Mississippi, \$6.2 million; Washington, \$5.1 million; Florida, \$4.8 million; California, \$4.3 million; and Pennsylvania, \$2.9 million.

Intercooperative business by 50 associations in 1961-62 was \$29.7 million, or 48 percent of net sales. This compared with \$8.6 million in 1950-51, or 39 percent of net sales.

The pesticides business has increased rapidly in recent years with growing emphasis on insect and disease control and development of chemical weed sprays and other new materials.

Cooperatives have been diligent in providing spray and dust materials best suited to the specific needs of producers and usually with substantial savings to them. About 23 cooperatives own 30 dust formulating or blending plants; however, nearly all of these cooperatives purchase the basic materials

from the country's major suppliers.

Cooperatives now handle a wide variety of complex pesticides—often 100 to 200 compared to 5 or 10 basic items handled 25 to 30 years ago. A major portion of the pesticides reach the farmer through supply cooperatives. Much also is provided by marketing associations, both as a service to members and as a method of assuring better quality in the fruits and vegetables they handled. Many marketing cooperatives provide custom spraying and dusting services, together with field specialists who advise on the care and management of members' groves.

Meats and Groceries

A total of 878 cooperatives sold food items in 1961-62. They had gross sales of \$68.9 million and net sales of \$55.1 million, compared with a gross volume of \$42.4 million and a net of \$34.1 million 11 years earlier. Thus, net business increased 61 percent during the period.

Leading volume States in 1961-62 were: Missouri, \$10.4 million; Minnesota, \$8.7 million; Wisconsin, \$6.4 million; Nebraska, \$4.7 million; and Kansas, \$4.6 million.

Intercooperative volume by 5 associations was \$13.8 million in 1961-62, or 25 percent of net business. It was \$8.3 million in 1950-51, also 25 percent of net sales. These figures indicate that local stores bought much of their requirements from other-than-cooperative wholesalers.

These net figures do not include city or urban consumer-cooperative food stores but only those operated by farmer cooperatives as such. These latter, however, often do

considerable business with non-farmers.

Many local cooperative food stores are departments of production supply associations. Operating generally in country towns, these businesses provide another cooperative service for farm families.

The principal regional farmer cooperatives that wholesale food items are Midland Cooperatives, Inc., Minneapolis, Minn. and Producers Grocery Company, Springfield, Mo.—an affiliate of Missouri Farmers Association, Columbia. Midland Cooperatives, Inc., operates a small coffee roasting plant and bakery at Superior, Wis.

National Cooperatives, Inc., Albert Lea, Minn., supplies from its label library, several million "CO-OP" canned goods labels to canneries on members' orders each year. It also purchases a small volume of groceries for regional associations.

General Farm and Home Supplies

A total of 4,578 cooperatives reported sales of general supplies in 1961-62. These included items used in farming such as tires, batteries, auto accessories, farm hardware and tools, animal health products, baling twine and wire, coal, plumbing supplies, baby chicks and poults, and lawn and garden supplies. They also included home appliances and home laundry and kitchen supplies.

As previously mentioned, some sales of building supplies, small farm equipment, and other items may be included in sales of general supplies by cooperatives that do not itemize their sales in detail.

Cooperatives had gross sales of general supplies in 1961-62 of \$342

million and net sales of \$196.2 million. Volumes for 1950-51 were \$268 million and \$190 million, respectively. Net sales increased only 3 percent, but this may have been due to more accurate itemizing of sales of general supplies into other categories such as building materials, and better reporting by the cooperatives.

The five States with largest net sales in 1961-62 were: Wisconsin, \$16.7 million; Minnesota, \$13 million; Ohio, \$11.9 million; Virginia, \$11.4 million; and Iowa, \$8.6 million.

Intercooperative business by 59 associations was \$145.8 million in 1961-62, or 74 percent of net sales. Such sales were about \$78 million in 1950-51, or 41 percent of net sales.

These data indicate wholesale cooperatives (regional and national) are handling more general supplies and that local cooperatives are buying an increasing proportion of their requirements through the wholesale cooperatives. The same situation applies to the two national supply purchasing associations and the patronage they receive from their member regionals.

Regionals pool their buying power for many farm supplies through two nationwide purchasing and manufacturing associations—United Cooperatives, Inc., Alliance, Ohio, and National Cooperatives, Inc., Albert Lea, Minn. The annual volumes of both have increased substantially in the last 10 years. Members have purchased larger amounts of tires, batteries, auto accessories, fencing, roofing, farm hardware, lawn and garden, and miscellaneous supplies.

Provide Related Services

MANY cooperatives find it advisable to provide certain services related to the supplies they handle for their members. As previously mentioned, local associations often deliver feed in bulk, grind and mix feed, clean and treat seed, blend fertilizer in bulk and field spread it, test soil, spray and dust insecticides, spray paint, rent equipment, counsel farmers on proper use of production supplies, and provide other similar services.

Some cooperatives also build fences, erect farm buildings, and install electrical wiring. Many associations handling farm machin-

ery also provide repair services. Those with service stations normally grease members' cars and trucks and repair tires. Data on receipts from these individual services, however, are not available.

Regional cooperatives provide numerous services for local associations. These include auditing, insurance and bonds, plant layout and engineering, commodity field service, trucking, assistance with organizational and educational problems, help with membership and financial campaigns, membership publications, and training for employees and directors.

Benefit Farmers Substantially

FARMERS derive many benefits by using cooperatives to obtain their production supplies and equipment. The larger number of producers obtaining an increasing volume of farm supplies through cooperatives attest to this fact.

It is difficult to exactly measure or evaluate benefits farmers have obtained from their supply cooperatives. This statement applies especially to the intangible benefits resulting from the cooperatives' effects on price levels or margins, service, quality, and business practices. Farmers generally believe these indirect benefits greatly exceed the tangible or direct benefits.

Some of the principal accomplishments of supply cooperatives in serving farmers have been men-

tioned throughout this bulletin. These, of course, vary by years, by areas, and by types of supplies and equipment. They may be summarized as follows:

1. *Savings have been made which substantially lowered the cost of production supplies for farmer-members.* Most retail supply cooperatives in the early years of operation realized substantial operating savings. For example, they often saved an average of 10 to 12 cents on each dollar's worth of petroleum products handled in the 1920-40 period.

In recent years, lower gross margins and higher expenses have reduced net savings to 3 to 5 percent on petroleum products and 2 to 4 percent of sales of feed, seed,



This fencing demonstration indicates another supply service provided by some farmer cooperatives.

fertilizer, and general farm supplies in many areas.

Net savings on wholesale operations of regional cooperatives generally are not as great as in earlier years. However, those from manufacturing or processing usually have been substantial—usually exceeding those from wholesale distribution. Reports of 20 major regional supply cooperatives showed their total net savings averaged between 3.3 and 5 percent of sales from 1959 through 1963. This was equal to 11 to 12 percent on their net worth or members' equities.

These major regionals do a considerable amount of manufacturing. Their net savings included dividends on capital stock and patronage refunds from national and area federations of regionals in which the 20 major regionals had membership.

Supply cooperatives with efficient operations thus have improved the buying power of farmers, reduced their costs of production supplies, and increased their net farm incomes. Estimated net savings on all supply operations of cooperatives in 1961-62 were \$150 million, or about 6 percent per dollar of sales.

When local supply cooperatives were first formed, many caused some reduction in the general level of retail prices and gross margins, thus benefiting all farmers in their communities. Regional cooperatives in some cases have prevented general price increases in fertilizer or feeds in their areas by not advancing their billing prices.

Some cooperatives had a salutary effect on business or trade practices in their area. Many have continued to exert such influences throughout the years.

2. High-quality supplies selected to give value-in-use benefits have

been provided for farmer-members. Another important accomplishment of production supply cooperatives has been improving the quality of feeds, seeds, and fertilizers. These cooperatives have selected supplies that best met the farmers' needs and that produced more yields per acre and gains per pound.

Cooperatives have pioneered in open formulas for mixed feeds and fertilizers. They have led the field in a number of areas in supplying farmers with high-analysis fertilizer. Adding needed secondary and minor elements, laboratory control, and granulation are other ways cooperatives have provided members with outstanding values in purchased plant foods.

Cooperatives have been especially helpful in selecting seed of adapted variety, high in germination and viability, and free of disease and noxious weeds. They have worked closely with experiment stations, contracted with growers to produce seed with known heredity, and established processing facilities.

Because they now use many different ingredients in feeds and these change as improvements are found, cooperatives now make available current formulas used rather than printing open formulas on the tag. Cooperatives have made much use of college conference feed boards in developing formulas that will give best results for farmers.

In procuring general farm supplies and equipment, many cooperatives have emphasized selective buying. Through the use of laboratory tests, farmer advisory panels, market research surveys, and agricultural engineering departments of State experiment stations,

cooperatives have determined the specifications of supplies best suited to farmer needs.

3. *Services in obtaining and distributing supplies have been improved or added.* Many supply cooperatives have been alert to meeting requests of members for types of supplies and services they want, when and where they want them. And they have tried to provide these services on the basis of their actual costs—that is, in an equitable manner.

Cooperative services may be grouped according to the following objectives or benefits:

a. Services that save time and labor, or money, or all three for the farmer. As mentioned, these include such services as bulk delivery of feed to farm, bulk blending and spreading lime and fertilizer, mobile feed milling, tractor tire repairing, custom spraying and dusting, and pool car ordering.

b. Services which may not have been readily available or convenient. Examples are feed grinding and mixing, renting of equipment, or petroleum deliveries to all farmers at some distance from bulk plants. Development of routes covered at regular intervals has enabled petroleum cooperatives to efficiently serve farmers in the East—small as well as large ones.

Personalized services also include contract construction of buildings and installing automated milking and feed systems.

c. Services that improve farm practices. These include soil testing; providing fieldmen or specialists to advise on use of supplies and good farm management; operating demonstration and testing farms; and providing information on good farm practices at meet-

ings, in publications, and in other ways. Cooperatives have emphasized services to members rather than maximum net operating savings.

4. *Dependable sources of supplies have been provided—especially in emergency periods.* One of the important services cooperatives provided to farmers during and after World War II was a dependable source of supply for major items. Their purchase or construction of refineries and fertilizer plants enable many farmers to continue producing needed food and fiber for the Nation. A few cooperatives have also acquired lumber and shingle mills and timber holdings for supplying growers or their fruit and vegetable packing associations. Cooperatives make special efforts to keep supplies

going to members during adverse weather conditions such as snow storms or floods. They purchase hay and other feeds during drought emergencies.

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Production supply cooperatives, therefore, generally have benefited all farmers within their trading territories. Many have become pacesetters in providing farmers with high-quality supplies at reasonable costs. Their farmer ownership and the influence of their operations have been in the interest of agricultural producers—both members and nonmembers. Supply cooperatives have thus helped farmers in their communities—especially the small family-size operators—to do a better and more profitable job of farming.

Face Future Challenges

COOPERATIVES handling production supplies face many problems in the years ahead. Many will be similar to those in the recent 10 years; others will be new. This section lists some of the broader challenges, with specific examples of each. Many overlap and their order of importance will vary among associations and areas. However, if cooperatives are successful with the last two listed—electing competent and progressive directors and obtaining competent managers—then most of the challenges will be met. Some challenges facing supply cooperatives are:

1. *Adjusting to rapid changes in agriculture.*

a. Fewer and larger farmers

who buy greater quantities of supplies.

b. More mechanized, scientific, and chemicalized farming.

c. More commercialized farms operated by farmers who are better businessmen.

d. Greater demand from farmers for more services—especially those that will save time and labor—and information on the proper use of supplies and what modern production practices to follow.

e. Development of suburbanization and ways of maintaining efficient services for remaining farmers in the area.

f. Impacts of changes in farm programs and of rural areas development.

2. *Adjusting to changes in economic and agribusiness conditions.*

a. Fluctuations in general business conditions and governmental attitudes and activities.

b. Increases in level of labor and other operating costs.

c. Keener competition in merchandising supplies and providing services.

d. Concentration of purchasing and other economic power as a result of business mergers.

3. *Keeping policies and practices efficient and equitable.*

a. Developing pricing policies for small, medium, and large patrons. This involves pricing at retail stores, wholesale warehouses, cardoors, and direct from plants to patrons.

b. Establishing equitable prices for cash sales, and charges for

accommodation credit, production credit, and term financing.

c. Departmentalizing operations, accounting, and patronage refunds.

d. Making equitable charges for various custom services.

4. *Adjusting organization structures and distribution systems.*

a. Consolidating retail stores or branches in some cases; adding branches or warehouses in others.

b. Using dealer-agents in some cases.

c. Supplying local cooperatives in carload lots with more supplies direct from factories, thus bypassing wholesale warehouses.

d. Providing management and financing services for locals.

e. Reorganizing some regional cooperatives from a federated wholesale to a centralized retail basis, or to a combination system,

Fieldmen of many cooperatives now advise farmers on proper use of supplies. This employee is demonstrating use of a plant food calculator.





This new nitrogen plant at Terre Haute, Ind., owned by four regional and national cooperatives, supplies local affiliates and their farmers with fertilizer. Farmers will continue to need even more capital in their cooperatives in the future to finance expensive facilities like this.

or establishing both types in some areas.

5. *Exploring ways of successfully handling capital goods and equipment.*

a. Studying ways of successfully handling farm machinery.

b. Exploring ways of providing custom farm machinery services.

c. Studying ways to handle building supplies and provide related construction services.

6. *Conducting research and long-range planning.*

a. Making short-range plans for services, facilities, and finances.

b. Developing long-range objectives and plans.

c. Conducting economic and market research to determine market potential, to increase volume, and

to improve operating efficiency.

d. Conducting product research and development in regional cooperatives, or by joint efforts of several regional associations.

7. *Providing contract farming and other integrated services on a sound and equitable basis.*

a. Determining amount of available resources to use in contract production as compared with other programs or services.

b. Evaluating how contract programs will affect other operations such as reducing overall unit operating costs.

c. Determining to what degree nonparticipating producer-members should assume risks in a contract program for a limited number of contract members.

8. *Obtaining capital to perform*

more diversified and integrated services.

a. Informing members of capital needs and possible benefits of investing more capital in cooperatives.

b. Developing more effective capital raising techniques, including use of capital assessments added to invoices.

c. Exploring possibilities of obtaining more capital from outside sources; that is, nonproducers and other business firms.

d. Studying possible advantages of using more permanent capital, including unallocated reserves, along with revolving capital.

9. *Coordinating and merging cooperative resources.*

a. Engaging in more joint or cooperative efforts with other cooperatives, especially in research and manufacturing.

b. Considering joint investments with investor-type firms, especially in research and manufacturing.

c. Encouraging more mergers among both local and regional cooperatives.

10. *Communicating with members and prospective patrons and exploring for better ways of motivating participation.*

a. Obtaining information from farmers as to their intentions to buy, their satisfaction or problems in using specific supplies, the services they desire, and the like.

b. Providing information effectively to farmers on the cooperative's products, services, objectives, goals, capital requirements, and accomplishments or benefits.

c. Studying ways of motivating people to patronize cooperatives and assume their responsibilities as members.

11. *Electing and training competent and progressive boards of directors.*

a. Improving methods of selecting directors who are sound businessmen with vision and who will adhere to cooperative principles.

b. Providing better training programs for directors, with emphasis on their legal and operating responsibilities, authority, and limitations.

c. Developing standards of performance and control for measuring the efficiency and effectiveness of cooperatives.

d. Improving compensation of directors so that they can afford to give adequate time to the affairs of the cooperative.

12. *Obtaining and keeping competent managers and other employees to operate larger and more complex cooperatives.*

a. Improving techniques for selection of managers and other personnel.

b. Improving training programs and techniques for all employees.

c. Developing compensation plans that will improve the performance of employees.

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The more successful farm supply cooperatives realize that they need to plan, adjust, modernize, innovate, integrate, merge, and continually grow. Their leaders are thinking in terms of new and better ways of carrying on their businesses to meet the ever-changing needs of their farmer-members. They are "gearing up" to meet greater challenges in the 1970's than they faced in the 1950's and 1960's.

Transportation Services Vital

by Robert J. Byrne
Chief, Transportation Branch

TRANSPORTATION problems spurred the early formation of farmer cooperatives in the United States. Originally, farmers drove their livestock to railroad sidings for shipment to market. Then came the horse and wagon days and cooperative livestock shipping

associations. Most of these associations had assembly yards located on railroad lines.

Here livestock in less than carload lots were grouped to form full carloads for rail shipment to market. In the early 1920's, there were over 5,000 such shipping associations.

Farmers Transport Cooperatively

THE demonstrated advantages of livestock shipping associations led to formation of transportation cooperatives and private ownership and operation of transportation equipment by individual farmer cooperatives and groups of cooperatives.

One association providing trucking services, Northern Cooperatives, Inc., is located at Wadena, Minn. Organized in 1933, its volume of business has increased and its services broadened to include marketing and purchasing for 232 local cooperatives in northern Minnesota. Its fleet of 45 trucks hauls farm products to market and backhauls farm and creamery supplies for member cooperatives.

Northern Cooperatives provides many of the small local associations with a transportation service they could not afford individually. In addition, weekly or biweekly transportation service allows member cooperatives to reduce inventory and release capital.

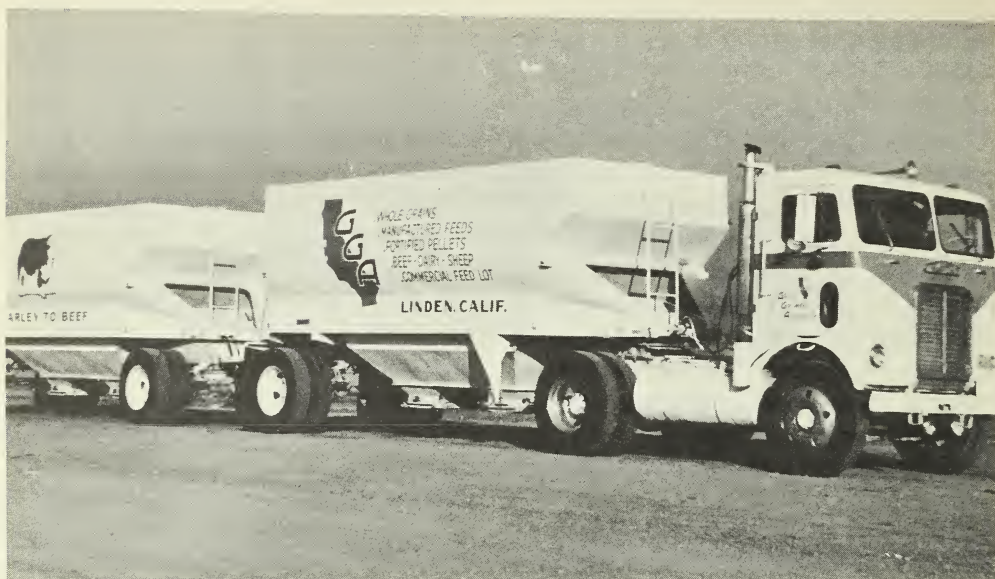
Thus, farmer members and patrons of these associations share in the benefits of increased returns on products marketed and lower costs on farm supplies purchased—savings made possible by a coordinated transportation service.

Use All Types of Transport

Cooperatives utilize transportation services and facilities to serve farmers at the lowest possible cost. To do this, they operate pipelines, barges, ships, and motortrucks to supplement for-hire transportation.

For example, farmer cooperatives operate an estimated 33,000 motortrucks—an average of over 3.5 trucks for each association. Most of these are used for local pick-up and delivery and movements from fields to local concentration points.

In petroleum operations alone, cooperatives operate 4 towboats, 5 tankers, 32 barges, and over 2,700



Cooperatives are operating more specialized trucks such as this truck train used by Grain Growers Association of California to haul bulk feed to members.

miles of pipeline plus hundreds of motortrucks. Grain marketing cooperatives operate over 45 barges on the inland waterways and some cooperatives have bought or leased covered hopper cars to haul grain.

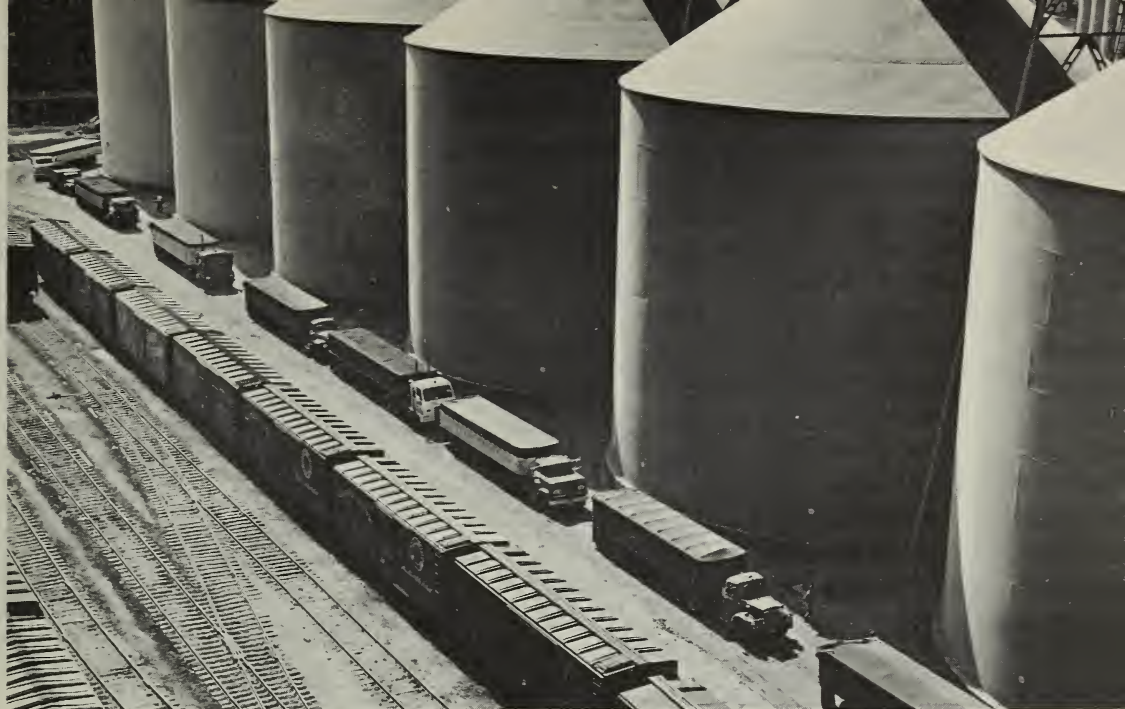
The need for maintenance of product quality and reduction in losses of farm products during transportation has received increased attention by cooperatives in selecting the type of transportation for a particular farm product. Air transportation is used by several cooperatives to transport such high-value perishable products as strawberries, hatching eggs, and breeding stock.

In 1961, for example, Indiana Farm Bureau Cooperative Association, Inc., Indianapolis, used air transport for moving turkey hatching eggs from California to Indianapolis. Over 1,725 cases, or approximately 34.5 tons of turkey hatching eggs, were shipped by air

to Indianapolis. In addition, the association received 7,000 baby poulters from Los Angeles by air freight.

A study recently completed by Farmer Cooperative Service showed that, in 1963, eight regional grain marketing cooperatives shipped over 100 million bushels of grain over the inland waterways at a transportation cost of about \$8 million. This is equivalent to the value of 73 barges, each loaded with 45,000 bushels of wheat.

Cooperatives are using the St. Lawrence Seaway to a greater extent. Grain from the West and the Midwest is moving through cooperative port elevators on the Great Lakes, where it is loaded on ocean-going vessels for export to foreign markets. In 1962, Farmers Union Grain Terminal Association, St. Paul, Minn., loaded out more than 26 million bushels of grain for export from its Superior, Wis., port elevator alone.



Motortrucks and rail cars lined up to unload grain at the Superior, Wis., elevator of Farmers Union Grain Terminal Association, headquartered in St. Paul, Minn. These loaded barges of grain (below) are heading toward market. In 1963 eight regional grain cooperatives barged over 100 million bushels of grain at a cost of almost \$8 million.



Feed grains and other feed ingredients are also moving over the Seaway from midwestern points to cooperative feed mills in the East. For example, Agway, Inc., Syracuse, N.Y., has used molasses shipped via the Seaway at a transportation saving of \$3 a ton, or 30 cents a ton of mixed feed.

The Seaway is also a route for imports of farm supplies to midwestern cooperatives. For example, Farmers Union Central Exchange, St. Paul, Minn., received a shipment of baler twine from Holland. The 50,000-bale shipment equal to 90,000 miles of twine was obtained for members at a savings not possible before the Seaway opened.

Develop Transport Equipment

Dairy cooperatives are using motortrucks designed to carry a bigger payload for long-distance milk hauling. Pure Milk Producers Association, Inc., Kansas City, Mo., operates a 4,700-gallon tanker that carries a payload of 40,420 pounds, thus reducing transportation costs on each gallon hauled.

Farmer cooperatives face increasingly complex marketing problems brought about by changes in customer buying habits and accompanying demands for service. To meet these demands, cooperatives are looking to transportation to provide some of the answers.

The need to design and utilize versatile transportation equipment to meet the needs of the market is demonstrated by a truck-trailer system used by Gold Spot Dairy, Inc., Enid, Okla. This cooperative distributes a line of dairy products to customers in northern Oklahoma.

However, none of its three plants processes a complete line of products, thus necessitating a large volume of interplant exchange to satisfy customers' needs.

To provide a flexible transportation and storage system, the association developed a straight truck and four-wheeled trailer with demountable refrigerated containers. The containers have telescoping legs which, when lowered, allow the containers to be detached from both the truck and the trailer. The truck and trailer chassis are then driven from under the containers and can be used to haul other containers to distribution points.

These containers then become mobile cold-storage rooms. This system has helped solve the supply problem and increased the storage capacity at plants.

Need Transportation Management

Today's marketing and distribution system demands transportation service tailored to the needs of the farmer as a producer and a customer. Farmer cooperatives, recognizing this need, are becoming increasingly aware of the contribution that sound transportation management can make by increasing returns to the farmer members.

The transportation bill on farm products marketed and farm supplies purchased by farmer cooperatives is estimated to be over \$1 billion a year. Two large marketing cooperatives have annual transportation bills of over \$40 million each.

Thus, traffic management has become a necessity in today's cooperative, if proper attention is to be given to this huge cost area. Such complex problems as transit privi-

leges, plant location, and proper selection of transportation media to move farm products and supplies require constant transportation supervision.

A study Farmer Cooperative Service made on traffic management showed that only 87 of 5,168 farmer cooperatives had someone assigned to handle traffic and transportation on a full-time basis. Yet, 78 of these 87 cooperatives stated the total cost they incurred for transportation of commodities in 1960 was about \$245 million, or an average of almost \$3.25 million per cooperative.

Determine Plant Locations

A problem facing many cooperatives is choice of location for expanding existing facilities or acquiring new facilities for manufacturing, processing, storage, or distribution. A major factor in choice of location is availability of adequate transportation at reasonable cost.

The initial cost of a plant site may not be so important as the availability of long-range, low-cost transportation. The cooperative

traffic manager is playing an increasingly important role in determining plant locations for his association.

Reflect Farmers' Needs in Transportation

Farmer members determine which way their cooperative turns on the road to market and the return trip to the farming community.

The farmer cooperative then operates as the "middleman" in reconciling the transportation needs of farmers with demands of the market. It is this sensitivity to the farmers' needs that makes the farmer cooperative an important voice in transportation matters affecting the farming community.

As marketing and distribution problems increase in complexity, the more efficient farmer cooperatives look to transportation as a new frontier for savings and service to their members. They realize their decisions in the field of transportation may well determine how smoothly their pathway to progress will be.

Local Processing Cooperatives

by Paul C. Wilkins
Chief, Frozen Food Locker Branch

SEVERAL generations ago farmers processed and stored on the farm most of the food supply for the family. They killed and prepared much of the meat eaten. They made their sausage; cured their pork; and canned, dried, and stored their fruits and vegetables.

Many of these tasks have since been taken over by frozen food

locker and related local processing plants.

Over 10,000 such firms in the country—some 600 of them cooperatives—now provide farmers and others with custom processing services. In addition, they provide a refrigerated storage service for patrons and, with the increase in the use of homefreezers by consumers,

often serve as a market outlet for locally produced food products.

This marketing activity has expanded into production of cured meats for sale; sausage manufac-

turing; and production of portion-control meats and other products for sale to locker patrons, home-freezer owners, institutions, and others in the local area.

Major Developments

THE first frozen food locker plant on record was built around 1908. Some 15 years later, the Whatcom County Dairymen's Association of Bellingham, Wash., initiated the movement of farmer cooperatives into the locker industry. This cooperative started in 1923 to freeze meat in boxes on the floor of the plant's sharp freeze room. In 1925, shelves were added.

The second cooperative to enter the picture was the Walla Walla (Wash.) Dairymen's Association, in 1927. In 1936, the Lee County Cold Storage Company, Amboy, Ill., and in 1938, the Plains (Tex.) Cooperative, Inc., opened locker plants.

Since the first frozen food locker cooperative was established, the frozen food locker and freezer provisioning industry has gone through three well-defined periods of development.

Early Periods

The first period, extending into the early 1940's, was primarily one when locker plants provided locker storage service and only a limited amount of fresh-meat processing. Most of the food was processed in the home by the farmer and his family and brought to the locker plant for freezing and storage.

The second period, from 1944 to 1949, saw a rapid growth in the number of locker plants. This was also a period when such processing

services as livestock slaughtering, curing, smoking, lard rendering, poultry dressing, and fruit and vegetable processing expanded.

The third period, which began about 1950, saw a definite slowing down in the construction of new locker plants. At the same time, there was a broadening of processing and merchandising activities brought about by the growing opportunity to provide food products and processing services to the rapidly increasing number of home-freezer owners and to local institutions.

Recent Trends

As might be expected in such a rapidly expanding new industry, too many plants, both cooperatives and others, were built. Many of them were poorly located, inadequately financed, and incapably managed. As a result, the number of locker and freezer provisioning plants declined from a peak of 11,600 in 1951 to 9,300 in 1959—a decrease of 20 percent.

The growing use of homefreezers by consumers reversed this trend, and again the number of plants is increasing. Much of this increase is due to newly established businesses that offer no locker storage services but provide food and processing services to homefreezer owners. In 1959, the industry served some 6.5 million patrons—a 30 percent increase from the 5 million served in 1954.

Ground beef patties are one of the more popular meat items available at Culpeper (Va.) Frozen Food Cooperative, Inc. Here an employee of the cooperative produces patties to meet the increasing demand of patrons.



Cooperative plants experienced a drop from 850 plants in 1948 to about 600 in 1960. Nearly two-thirds of the frozen food locker cooperatives are located in the Midwest with the largest number in Minnesota. Three-fifths of these cooperatives are located in rural towns of less than 1,000 population; about half of them are affiliated with other businesses such

as milk plants, farm supply, and other cooperative enterprises.

Role

TODAY, food processing and merchandising is characterized by large-scale organizations, mass distribution, national advertising, and the growing importance of large-volume, self-service retail stores.

Local processing and marketing cooperatives have an important contribution to make in the food business, particularly in furnishing many products and services not generally offered by other types of food establishments.

Two Functions

These generally fall into two categories. The first is the traditional function of the frozen food locker plant and includes custom processing and storing food produced by the patron for his own consumption; provisioning home freezers with quantity lots of frozen meats, fruits, and vegetables;

and supplying a market for meat and meat products of a quality not otherwise available in the community.

The second category covers processing and marketing. This includes processing locally produced livestock for the local retail and institutional market, producing specialty products peculiar to an area that cannot be provided efficiently by more distant or more specialized firms, and producing meat products that can best be used near the point of consumption.

Local processing and distribution of locally grown foods reduces transportation and distribution costs. Nearness to sources of raw materials, abundant labor supply, and inherent flexibility of operations are elements that enable these organizations to compete successfully in their market.

Low-Income Areas

In many low-income rural areas, farms have small volume production. Farmers incur high costs in selling their products in distant markets. Local processing and merchandising cooperatives fre-

quently provide a suitable local market for these products. Thus the cooperatives increase returns to farmers as well as contribute to a higher level of economic activity in the area through increased local employment and local purchase of supplies and services.

Accomplishments

LOCAL processing cooperatives are keeping abreast of their patrons' needs through increasing services, stepping up commercial activities, and adjusting operations.

Services Increased

Frozen food locker, freezer provisioning, and related processing cooperatives perform a wide variety of services.

Nearly all of them provide chilling, aging, cutting, grinding, wrapping, and freezing services for patrons; and nearly half also provide livestock slaughtering services.

Other services include pork curing, lard rendering, sausage manufacturing, poultry processing, fruit and vegetable processing and freezing, and game processing.

Many cooperatives also provide patrons with meat and meat products either slaughtered and processed by the cooperative or procured for the patron from commercial sources. They also provide patrons with wholesale quantities of commercially frozen fruits, vegetables, juices, and seafood produced outside the area.

Commercial Activities Growing

Frozen food locker and related processing cooperatives have slowly but steadily expanded their commercial processing activities. Nearly

one-fourth of these cooperatives purchase livestock for slaughter and resale to patrons or to institutions and other outlets in the community. Over one-fourth of them also produce cured pork products and pork sausage for sale while a few are developing markets for portion-control meats.

Some cooperatives provide a market for locally produced livestock by producing a variety of sausage for which a local demand exists. Others are corning beef, dressing poultry, and producing specialty meat items for local consumption.

Cooperatives, in general, however, have not moved into the areas of commercial processing or marketing to the same extent other types of businesses have. The cooperatives were established as service organizations for member-patrons. As such their main objective was, and largely still is, to process and store products for members. The opportunity for greater service to members through increased processing and marketing of members' products is a challenge facing these cooperatives.

More Patrons Served

Figures on patrons served by locker and related cooperatives show a steady growth. The greatly expanded use of homefreezers has provided these cooperatives

with a much broader base of patrons. As more and more rural families acquire homefreezers, cooperatives are providing custom processing and merchandising services to more and more patrons.

Locker and related processing cooperatives operating in 1955 were serving an estimated 235,000 patrons. In 1960, these cooperatives served 325,000 patrons—an increase of nearly 40 percent in 5 years. Their ability to continue serving rural families successfully will depend to a considerable extent on their willingness and ability to adjust to the changing need of their patrons and their success in improving efficiency and reducing costs to meet increasing competition.

Varying Needs Met

While, in general, cooperatives have been slow to take advantage of many new opportunities, a number of them have made significant progress in both processing and merchandising fields.

For example, the Hancock Frozen Foods Cooperative, Carthage, Ill., serves some 1,200 families in the county with high-quality meats and food processing and storage services. Among its services are livestock slaughtering; curing and smoking; chilling, cutting, wrapping and freezing beef and pork; lard rendering; and locker renting.

In addition, the cooperative buys livestock from farmer-members for slaughter, processing, and resale to other members, to retail stores, restaurants, and other outlets in the community, and to a nearby college. It also produces cured pork products, portion-control meats, and sausage for sale.



Hancock Frozen Foods Cooperative of Carthage, Ill., is an example of how locker and freezer provisioning cooperatives are constantly modernizing facilities to better serve member patrons.

Farmers in Morgan and Scott Counties in Illinois depend on their locker cooperative, Chapin, Ill., Locker Service, to custom slaughter and process their farm produced animals. Here a dressed hog is weighed before being cut up.





Managing a frozen food locker cooperative is a team approach between the manager and the board of directors. Here the board and the manager of Edgar County Locker Service, Inc., Paris, Ill., are meeting to consider business affairs of the cooperative.

Another cooperative, the Lee County (Illinois) Cold Storage Company, illustrates another approach to local processing. Emphasizing freezer provisioning service to both rural and town families, the cooperative provides quality food and processing services to some 2,000 families in the county.

This cooperative also had developed a high-quality, mild cured ham that has won five Grand Championships in a National Ham Contest. Production of cured hams is being increased to meet the growing demand from restaurants, hotels, and other commercial outlets in the area.

The Augusta Frozen Food Cooperative, Inc., Staunton, Va., is an example of still another important

role of the local processing cooperative. In addition to slaughtering, poultry dressing, pork curing and smoking, and fresh meat processing, this cooperative provides a market for show beef from the 4-H Club and Future Farmers of America Fat Stock Show and Sale in the area.

The cooperative believes this service strengthens the market, provides greater returns to the boys and girls who show animals, and encourages more young people to participate.

The Augusta cooperative also contributes to the economic well-being and growth of the community. It employs more than 20 full-time and part-time people, thus providing much needed off-farm

job opportunities in the county.

The Central Carolina Farmers Exchange, Durham, N.C., illustrates how a multipurpose operation functions. This cooperative, in addition to its major farm supply business, operates a large poultry dressing and freezing plant, an egg marketing service, a livestock auction, a slaughter plant, and a locker plant. The locker plant, with its cooling, processing, freezing, and storage services, is an

important link in this system of marketing local products.

It successfully produces southern-style country cured hams much in demand by consumers. It also wholesales these hams to retail outlets in nearby counties.

Large meatpacking companies do not produce this type ham. Thus this cooperative fills a local need and at the same time provides an additional market for producers' livestock.

Need for Adjusting to Change

LOCAL processing cooperatives have contributed to better rural living by improving quality of locally processed foods, upgrading diets, increasing consumption of high-energy foods, and reducing waste, and spoilage.

Increased level of income; greatly expanded use of home freezers; and changed buying, storing, and eating habits of rural people all point to increased consumption of a wide variety of frozen foods. Local processing cooperatives as processors, distributors, and merchandisers of locally produced foods are well situated to benefit from this expanding market.

The decreased number of farm

families, relatively increased number of rural nonfarm families, increased specialization in farming, and decreased number of rural families growing food for their own use—all these pose problems of adjusting to the changing needs of patrons.

Progressive cooperatives are adjusting operations to increase their usefulness as local marketing organizations and to expand their custom services to rural people. They are meeting increased efficiency of competing businesses by working towards greater efficiency in their operations and by developing sound merchandising programs.

Service Cooperatives

by French M. Hyre
Chief, Farm Services Branch

THROUGH their service cooperatives, farmers provide them-

selves many necessities for carrying on modern farm businesses.

Mutuals Provide Farm Insurance

FARMER mutual fire insurance companies are another type of cooperative much used by farmers.

By working together through their own mutual companies, farmers have been able to provide themselves with low-cost insurance protection against loss by fire, lightning, windstorm, and other natural hazards.

As of 1964, approximately 1,500 farmer mutual fire insurance companies were scattered throughout the United States. They were operating in at least 40 of the 50 States. They had outstanding more than \$35 billion of insurance. This represented somewhat more than half of all the fire insurance carried on farm property.

Farm mutuals have a record of successful operations. They provide farmers with sound insurance protection at a reasonable cost. They carry on fire prevention campaigns and encourage their members to eliminate dangerous fire hazards from their dwellings, barns, and other farm buildings. This is important in holding premium and assessment costs to a minimum.

More than half the existing mutuals have operated for more than half a century. Several have been in existence for more than 100 years. Thus, through periods of economic panic, prosperity, depression, war, and peace, farm mutuals have provided their members with sound insurance protection. In a large and increasing number, farmers have availed themselves of these services.

Early History

Cooperative action by farmers to provide insurance protection for themselves and their neighbors dates back to Colonial days. At that time there were only a few insurance companies in America, and none of these were writing insurance on farm property.

Since fire insurance was not available to those early settlers, it was only natural that neighbors should help each other in times of economic disaster caused by fire. The same neighbors who got together at a logrolling to help a man build his cabin would run to help form a bucket brigade if his house caught fire.

When the fire was put out, these same neighbors again shared their labor and materials with him to rebuild or repair his house. They also helped him get a new start by giving or lending him what household and farm equipment they could spare.

The first mutual insurance companies formed by farmers put such neighborly cooperation on a business basis. Instead of asking for voluntary contributions, the company levied a definite assessment against the membership. The amount of insurance each member carried in the company determined the size of his assessment.

Quakers and other religious groups started some of the early fire mutuals. The Grange started others. Still others started simply because a group of farmers felt the need for insurance protection.



The lack of fire-fighting equipment, lack of water, and difficulty in reaching the fire on time resulted in total loss of this farm home. Estimated loss of farm property from fire and lightning in the United States now exceeds \$190 million each year. Much of this is covered by insurance provided by farmers' mutual insurance companies.

Some undoubtedly sprang from the cooperative idea brought to this country by early immigrant groups, particularly the Scandinavian and the German.

Many of the early farmer mutual fire insurance companies organized under laws that provided for companies operating in areas defined in terms of township or county mutuals. Many continue to operate in rather restricted areas, such as 1 to 15 townships, or a single county.

Fire insurance was the first coverage offered by the farmer mutuals. Later some of them added windstorm insurance. Experience has shown, however, that windstorm coverage cannot be safely carried by the smaller companies that confine their business to a single county or a smaller area.

Most mutual windstorm insurance is carried by companies operating in a whole State or a wider area.

The North Atlantic States, generally speaking, are well covered with farm mutual insurance companies. Some companies here are among the oldest in the country.

In New York and Pennsylvania, many farmer mutuals organized to serve relatively small areas. There has been a general tendency on the part of most of the mutuals to gradually expand their areas of operations. Some now serve 10 or more counties.

Another trend in the Eastern States is to insure more nonfarm business than farm business. In Pennsylvania, one-fourth or more of the insurance carried by the farm mutuals is on nonfarm property.

From the Eastern States, the idea of small local farmer mutual fire insurance companies spread to the Midwest. Many Midwestern States patterned their farm mutual insurance laws after those of New York, which provided for township and county companies. Several of these State laws provided that 25 or more persons residing in any township of the State and owning a total of \$50,000 worth of farm property, which they desired to insure, might form themselves into mutual assessment insurance companies.

This form of rural cooperation succeeded. In 1963, more than 100 farmer mutual fire insurance companies were operating in each of 5 States—Illinois, Minnesota, Wisconsin, Iowa, and Missouri. In many Midwestern States, the farm mutuals write a large part of the fire insurance carried by farmers.

In many Southern States, farm mutual insurance companies have developed much less than in the Midwest and the North Atlantic States. In some cases, this has been due to the lack of suitable laws under which local farm companies could organize and operate. Likewise, in many Western States development of farmer mutual insurance companies has been less extensive.

Membership Control

Ownership and control of farmer mutual insurance companies rest entirely with the policyholders. Every policyholder is a member of the organization, and as such is entitled to one vote in the election of directors. Directors ordinarily are farmers chosen from

among the membership. They meet about once a month to discuss and act on matters of a general policy nature.

In the smaller companies, the directors frequently act as agents or fieldmen and write the applications for insurance. However, this practice is less prevalent now than in earlier years. As the companies get larger, the tendency is to use full-time and part-time agents.

The day-to-day operations usually are handled by the secretary. He receives applications for insurance and prepares the policies, which are then mailed to the applicants. He keeps the record and sends out notices of assessments. He handles all general correspondence and arranges for loss adjustments in case of fire.

In the larger companies more personnel are required, both in the office and in the field. Many of these now own their own modern office buildings located in a convenient town or village.

Operating Practices

The earliest of the farm mutuals started as simple assessment mutuals, levying after each fire an assessment sufficient to pay the loss.

Assessments

In the early days when the companies were new and extremely small these assessment practices often worked fairly well. But as the companies grew and the membership expanded, losses usually became more frequent. Collection of an assessment after each fire became somewhat of a nuisance. Many companies decided that it would be better to levy one assessment each year to cover all the necessary outlay. During the year,

they sometimes borrowed money as it was needed to pay current losses and expenses.

Some companies collect this assessment at the end of the year when they can determine the total amount of the losses and expenses. This is called the postloss assessment plan. Others estimate probable losses and expenses from past experience and collect assessments at the beginning of the year. This is called the advance assessment plan.

Most companies now have switched over to the advance assessment plan. This has considerable advantages. It provides the company with funds to pay losses as they occur from time to time. It eliminates the possibility of anyone's enjoying insurance protection for a year and then refusing to pay his assessment at the end of the period.

Only a few companies operate on the postloss assessment plan. In actual practice, most of them now collect enough in advance to pay probable losses and expenses for a year ahead and, in addition, add something to the company's surplus.

Maximum Single Risk

Insurance companies usually limit the amount of insurance on a single risk; that is, a building or a group of buildings which might be destroyed by one fire. The house and the barn ordinarily are considered separate risks, if there is as much as 100 feet of clear space between them. If there is less than 100 feet of clear space, they are usually considered one risk. However, some companies consider 50 feet of clear space sufficient.

The maximum amount of insurance any given company can safely

carry on a single risk depends upon the size of the company, the amount of insurance in force, and the amount of reserves on hand. Some smaller companies limit the amount of insurance they will carry on a single risk to \$5,000 or less. More of the companies go up to \$8,000 or \$10,000. Some now have even higher maximums. This maximum means the amount they will carry on any one risk without reinsuring a part of it.

Reinsurance

Many farm mutuals reinsure a part of the larger risks with other companies. In some cases, such reinsurance is obtained from other direct-writing farm mutuals. In others, reinsurance is obtained through specialized reinsurance companies.

Some specialized farmer statewide reinsurance mutuals now are operating in the United States. Groups of local farmer mutual fire insurance companies formed most of them.

Through these statewide reinsurance mutuals, a local farmer company is able to reinsure a part of any risk which exceeds its established maximum single risk. Such an arrangement is of considerable help to local companies. For example, a dairy farmer may have buildings he wishes to insure for \$20,000 in a farm mutual. If a small county mutual undertook to carry unaided a \$20,000 risk, it would subject itself to a heavy loss in case of fire. With a proper type of reinsurance contract, the local company could accept the \$20,000 risk and then reinsure a substantial part of it in another company. Thus large risks can be divided between two or more companies.

Reinsurance is a means of carrying the insurance principle one step further. It insures the direct writing company just as the direct writing company insures the individual. It is a transaction that causes no inconvenience to the individual, since it is entirely an intercompany arrangement. In case of loss, the individual looks to his local company for settlement. The local company then collects a portion of the loss from the reinsurance and from the reinsurance company.

Reserve Funds

Along with the change in assessment plans has gone a change in practices with regard to building up reasonable reserves or surpluses, often called safety funds. The companies have found many advantages in maintaining such funds. The ability to pay losses promptly, even though they are unexpectedly large, is undoubtedly the most important advantage. Instead of making a policyholder wait until an assessment can be levied and collected or until money can be borrowed to pay his loss claim, the company can draw on its own funds. Thus it can make immediate payment as soon as the loss is adjusted. To a farmer anxious to repair or rebuild his property, immediate payment is most desirable.

The building up of safety funds also helps to avoid paying interest on borrowed money. Instead, the company usually has a small income from interest on money invested or held in the bank.

An accompanying reduction in mailing and collection costs grows out of normally making a single

assessment each year. Only when losses are abnormally heavy should a company find it necessary to levy more than its regular annual assessment.

A substantial safety fund is the best assurance a company can have that it will not be required to levy an additional assessment in the event of above normal losses.

Factors Affecting Rates

The assessment rates in farmer mutuals are adjusted by each company to reflect its loss experience. The bylaws now in common use among farmer companies permit an annual assessment sufficient to pay losses and operating expenses and to make reasonable allowance for a reserve or safety fund. Costs in the various sections of the country reflect regional differences in property hazards and in operating methods of farm mutuals.

Some farm mutuals vary their rate from year-to-year to reflect their current experience. Many, however, charge the same rate each year, keeping the right to levy additional assessments if needed. Ordinarily this is not necessary. Many companies have operated for years on an annual assessment of 50 cents or less per \$100 of insurance. They have built up sizable reserve funds as well as paying losses and expenses.

Charging a flat rate for risks of all types is most common, but there is an increasing tendency to vary the charges on buildings of different types according to degrees of hazard. The most common distinction is the use of property—whether dwelling or barn. This distinction is based on the common belief that a barn involves a greater fire hazard than a dwelling.

Spontaneous combustion from hay storage, smoking in the barn, accumulations of dust, and using gasoline engines or electric motors are factors involved. A fire in a barn is likely to go unnoticed until it has developed to sizable proportions. In contrast, an incipient fire in the house is much more likely to be discovered and checked before it gets out of hand.

Use of fire-resistant roofing is another common basis of differences in rates, particularly for dwellings. Studies show that sparks on the roof have been a frequent cause of dwelling fires. Fire-resistant roofing helps greatly in reducing the number of such fires and the amount of damage they cause.

Presence or absence of lightning rods is another basis sometimes used in setting up classes of farm property for rating purposes. In several Midwestern States, some of the companies were originally organized to insure rodded property only. Or they divided all insured property into two classes, rodded and unrodded, and charged the rates on each type of property in proportion to losses.

Most farmer mutuals have relatively simple classification systems, if any. However, a few have set up quite complicated systems of charges and credits for various characteristics of property. These may include lightning rods, roofing material, type of chimney, wall material, exposure to other property, use of building, adequacy and availability of water supply, use of spark arresters on chimneys, and emergency fire protective measures such as fire buckets, hose, ladders, and fire extinguishers.

A simple classification system is

normally adequate for a company operating in a small area where one type of farming is prevalent and nearly all farmers follow the same practices. Even charging the same rate for all property involves no great injustice, since all properties in the community have about the same fire hazards.

For companies operating in a wider area, where property varies considerably in use and in construction, there is more advantage in systematic classification of insured property. Charging a farmer for insurance in proportion to the hazard involved encourages him to improve his property to get a lower rate. Thus losses may be avoided to the common benefit of the farmer, the company, and the community.

Inspecting Property

Farmer mutual insurance companies almost always make a thorough inspection of property before writing insurance. In some cases property is reinspected periodically or whenever considered necessary during the policy term.

Property inspection provides a basis for evaluating property for insurance and for judging its hazards in order to classify it properly. It also provides a means for discovering, and providing for, elimination of needless and easily remedied fire hazards. Some companies refuse to insure property on which such a fire hazard exists until the hazard has been removed. If a policy has already been written on the property before the hazard is discovered, insurance may be suspended until the owner has made the necessary improvement.

The experience of many compa-

nies has proved that inspection pays dividends in reduced loss costs. Repairing a dangerous chimney, discovered through property inspection, may save loss of a dwelling. Inspections made periodically during the policy term or at least whenever insurance is renewed also help to keep insurance in proper proportion to value.

A farmer may have torn down an insured outbuilding and neglected to report the fact to the insurance company. Meanwhile he pays assessments which cover that building along with the others and the company invites possible complications in loss adjustment if a loss should occur. A farmer may also have built an addition to an existing building or may have built a new outbuilding. He needs fire insurance on such additions just as much as on his other property.

Farmers sometimes change the use to which a building is put. A building insured as a granary may later be used as a machine shop or shed. The increase in hazard may make the company unwilling to insure the building at all, or willing to insure it only at a special rate. The shift in use of the building may automatically suspend existing insurance.

General changes in property values as a result of changing economic conditions also make periodic inspections necessary to keep insurance values in proper relation to current property values. If insured values are too high in proportion to current property values, serious complications may arise. Or if they are too low, it means that the owner is not adequately protected.

Inspections are valuable as a means of educating the insured

members of a company. A farmer may not actually know what constitutes a fire hazard. Even though he recognizes a fire hazard when it is brought to his attention, he may be unaware of the existence of a particular hazard on his property. If he accompanies the insurance company's inspector on an investigation of his own property, he may learn much about fire hazards and their elimination.

Other Fire Prevention Measures

Special circulars, small periodicals, and placards sent out by farm mutuals constantly reiterate means of combating some common causes of fire such as careless use of matches, careless smoking habits, and poor housekeeping. Many companies issue helpful hints on how to prevent fire with their annual statements or at other times during the year.

For example, in the fall a company may advise its policyholders to check their chimneys and heating equipment to see that they are in order for winter use. It may advise them in the proper methods of ash disposal.

Fall housecleaning is in order at the time in both house and barn; therefore, the notice may carry suggestions as to cleaning up odd corners in basement, closets, and attic, as well as in the barn. It may discuss rubbish disposal as a means of fire prevention.

To supplement their regular inspection service, some farm mutuals issue self-inspection blanks for the farmer to use in inspecting his own property.

The National Association of Mutual Insurance Companies has promoted a National Youth Safety Contest with prizes for the boy and the girl who turn in the best in-

spection reports and essays on fire prevention. Some State associations have cooperated with the National Association in this contest, providing State prizes for the best work offered in the State.

Each contestant must inspect several farm properties in addition to his own home and fill in a questionnaire applying to each. Some contestants have secured the cooperation of property owners in the removal of fire hazards.

After completing the property inspections, the contestant must write an original essay on fire prevention. Such contests are beneficial for the future as well as the present, since they educate future farmowners to remove as many fire hazards as possible from property.

Accomplishments

Farm mutuals have made significant contributions to their farmer members and to the communities of which they are a part.

Help Volunteer Fire Departments

Some farmer mutuals have cooperated for many years with local organized firefighting groups to provide rural fire protection. A Maryland company, for example, 100 years ago reported a contribution made to two local firefighting organizations.

Cooperation between fire insurance companies and local firefighting groups has developed considerably. Some companies contribute a stipulated amount each year to one or more local fire departments. In return, fire trucks serve the policyholders of the company or, in some cases, all farmers in the area. Other companies reimburse the local fire department for all runs made to policyholders of the company.

Investment in fire department service or actual ownership of fire trucks seems to have been profitable. There is no accurate measure of the exact amount saved in losses, but every available report shows that annual losses decreased as soon as fire protection became available.

Form State and National Groups

State associations and the National Association of Mutual Insurance Companies have been useful instruments in developing local farmer mutual insurance companies. They have enabled local companies to get a wider view of the problems they have in common with other companies. Through annual meetings at which they discuss their problems and possible solutions, local associations keep abreast of current insurance developments.

Development of a recommended standard policy form for farmer mutual insurance organizations is among the important contributions of the National Association. This policy form has been widely adopted by local companies all over the country.

In several States, all local farm mutuals are active members of the State association. The secretaries of some State organizations keep in touch with their member companies throughout the year by means of circular letters.

The annual meetings of the State associations are important exchange centers for ideas about solving farm mutual problems. The problem of reinsuring risks too large for a local company to carry, for example, is one that has been threshed out in both State and National Association meetings.

Several mutual reinsurance asso-

ciations have developed at least partly as outgrowths of such discussions.

During recent years, the National Association has sponsored a series of management training schools for officers and directors of farmers' mutual insurance companies. These have been valuable in helping the smaller companies keep up to date in methods and techniques of handling farm insurance during a period of changing agricultural conditions.

Save Money for Members

For the country as a whole, costs of farmer mutuals have averaged substantially less than those charged by some other types of companies. Yet charges of farmer mutuals have been sufficient to carry the risk assumed, as their long record of successful service proves.

The low cost in farmer mutual insurance companies may be explained in several ways. Their nearness to the insured farmer is one explanation. When they write insurance on farm property, they write it knowing the property and knowing the farmer who owns it. Personal knowledge of the property as a result of living in the same community gives directors and employees of a farm mutual an advantage impossible to a large company whose operations extend over a widespread area. There is no doubt that such personal knowledge of property and its owner reduces the possibility of insuring property involving either a physical or a moral hazard.

A thorough inspection of property added to this personal acquaintance reduces still further the risk of loss on insured property.

Another explanation of low cost in farmer mutuals is their moderate operating expenses. A farmer mutual with its office in a low-rent rural area often escapes much of the expense of office maintenance that larger companies have. Moreover, the mutual's salary scale is frequently below that paid by other companies.

Show Many Results

Farmer mutual fire insurance companies write more than \$35 billion of insurance annually through some 1,500 companies. Total annual costs have averaged about 25 to 30 cents per \$100 of insurance, of which approximately two-thirds has been used to pay losses.

No adequate measure exists, however, for the service performed by the farm mutuals. Their competition has undoubtedly kept the rates of other companies on farm property lower than they would have been otherwise. Mutuals have contributed much toward reducing losses through their fire prevention efforts. The fact that their loss costs have averaged relatively low is an indication of the effectiveness of their loss prevention program.

The typical farmer mutual fire insurance company still is one operating in a single county or in adjoining counties with \$20 million to \$30 million of insurance in force. Improved roads and transportation facilities have enlarged the area which can be served. As a result there is a trend toward expansion of territory and increase in volume of insurance. There have been some consolidations and mergers among the smaller companies, and it seems likely that this trend will continue.



Corn grows bigger in western Nebraska when irrigation water is available. Adequate soil moisture at tasseling time is a crucial factor. In many areas where rainfall is inadequate or undependable, farmers have organized mutual irrigation to provide water for growing crops.

Water for Growing Crops

COOPERATIVE or mutual irrigation companies supply water for about 25 percent of all the land irrigated in the United States. Irrigation districts supply water for about 20 percent. The Bureau of Reclamation, commercial companies, and individual farm irrigation systems pumping direct from streams, ponds, or wells, supply the remainder.

The mutual or cooperative irrigation company is a voluntary association of persons producing farm products under irrigation. Its purpose is to obtain and distribute irrigation water at cost for use primarily on lands of its owner

stockholders or members. Since they supply irrigation water to members at cost, these associations reduce the cost of production and increase returns from farm operations.

The mutual company differs from the irrigation district in that membership is entirely voluntary. Any farmer in the area may come in or stay out as he chooses. Only those who come in contribute to the cost of maintenance and operation of the company, whereas in the irrigation district, every farmer must bear his share of building the irrigation works, whether or not he uses the water.

An irrigation district is a public or semigovernmental institution. It is formed as a result of a public statutory procedure initiated by landholders within a given area who want an irrigation district formed. An election is held. A majority can vote the minority in, provided the land of the latter will benefit from irrigation. Once the irrigation district is organized as a result of majority vote, every landholder in the area becomes liable for his pro rata share of the cost.

Mutuals Started Early

Cooperative irrigation in modern form and of the type now widely used throughout most of the West apparently had its beginning in Utah around 1850.

The pioneer Mormons who settled the Salt Lake Valley soon discovered that irrigation was necessary to their existence. They were in an area with limited capital and found it beyond the power of an individual to turn the main streams from their courses and spread water upon the land. Thus the early Utah settlers turned to the cooperative form of enterprise to provide themselves with necessary irrigation facilities. Several of these early mutual companies are still in existence, having supplied their members with irrigation water on a nonprofit basis for more than 100 years.

The Utah projects usually are regarded as the beginning of modern cooperative irrigation (sometimes referred to as Anglo-Saxon type of irrigation) in this country. An earlier form of community irrigation ditches with many coopera-

tive features developed, however, at a much earlier date in the territory that is now New Mexico and Arizona. According to reliable history, the Spanish explorers, riding up the Rio Grande Valley and its tributaries, found the Pueblo Indians already growing crops under irrigation. The early Spanish settlers in this area adopted the Indians' irrigation practices with some variation and handed down to the present generation an irrigation system of community ditches usually regarded as cooperative enterprises.

In California, many of the mutual irrigation companies were organized to take over and operate irrigation systems originally constructed by land development companies. In the early days land development companies often found it necessary to install an irrigation system in order to sell the land.

After the company sold the land it had little or no interest in the irrigation system. Frequently the company encouraged the new land owners to organize a mutual company to take over and operate the irrigation system. In some cases, transfer of ownership to the new landowners was accomplished more or less automatically by transferring one share of stock with each acre of land sold. Thus when sales were completed, ownership of the irrigation system rested in the hands of the new landowners.

Not all California companies originated in this manner. Landowners organized some of them to obtain additional supplies of water when the original supply proved to be inadequate. They set up certain mutual companies to take over and operate irrigation districts that

had to be reorganized and others to take over and operate irrigation systems originally developed under the Federal Reclamation Service. In all instances, however, the purpose of the mutual company has been to supply water to member landholders at cost.

Mutual irrigation companies are either stock or nonstock organizations. Both types exist for the same purpose and perform the same general service. They differ principally in location, size, and methods of operation.

Many Unincorporated

About two-thirds of the mutual irrigation companies are still unincorporated. Generally these are the smaller companies operating in situations where expensive facilities are not required. Even so, there would be considerable advantage in these companies becoming incorporated.

The incorporated company has authority to enter into contracts, borrow money, hold property, and transact business in the name of the corporation. It can do this in a way that limits the liability of its members as individuals.

In an unincorporated company, a business transaction often can be blocked by a minority of the members; and this slows down the activity of the company. Only when the group is small and members will work together can the unincorporated company operate satisfactorily.

In New Mexico and Arizona, the "community acequia" is a semi-public institution with many cooperative features. It is public to

the extent that all landowners in the area are required to help keep the irrigation ditches clean and in usable condition. Contributions in this regard are frequently in the form of donated labor rather than in cash.

Maintenance and operation of the system are in charge of a committee elected by those who use it. One-man, one-vote is the general rule. The system provides water to its members at reasonable cost.

This type of irrigation is best suited for use where expensive irrigation works are not required. It also fits an area where farms are small and the background and temperament of the people will permit them to work together informally in small community enterprises. This type of organization is not well suited for use in any area where extensive irrigation facilities are needed.

In California, Utah, and most other Western States—where irrigation is practiced on a large scale—many irrigation companies are of the capital-stock type. The capital stock ordinarily serves two purposes. First, it serves as a means of raising capital for building the necessary irrigation facilities such as dams, canals, and ditches.

Second, the company uses the capital stock as a basis for allocating water and assessing operating costs. Thus, a share of capital stock in a mutual irrigation company frequently represents not only an equity in the organization's assets, but also a right to receive a certain proportion of the irrigation water delivered by the company.

In many instances, the water rights that go with the share of stock determine the stock's market value

and not the assets that it represents.

In some companies, the stock is attached to the land served by the company and cannot be sold except at the time the land itself is sold, in which case the stock automatically goes with the farm.

Most of the stock companies are incorporated. This not only limits the liability of the members but also aids the company in carrying on its operations in a businesslike manner.

Provide Service

The service performed by the mutual irrigation company is confined almost entirely to furnishing water for irrigation to the members on a nonprofit basis. However, delivery of water to a few nonmembers, for purposes other than irrigation, does not affect a company's mutual status.

To bring irrigation water to member farmers, it is usually necessary for the irrigation company to construct, maintain, and operate certain facilities such as dams, canals, and ditches. In some areas, the company uses pumping stations extensively to bring up subsurface water.

In addition to the task of obtaining water and bringing it to the area where it is needed for growing crops, the mutual irrigation company must devise a way to allocate the water equitably among members. Sometimes the company allocates water on an acreage basis. More frequently it allocates water on the basis of shares of stock owned. This makes it extremely important to have the stock distributed among members in proportion to their water needs.

Owned by Water Users

Member-patrons of a mutual irrigation company own and operate it in much the same way as members own and operate any other cooperative. Membership is voluntary, and legally a farmer may affiliate with or withdraw from the company at will.

Economically, however, his freedom of action may be much more restricted. If a farmer must have irrigation water in order to operate his farm successfully and the mutual company is the only source from which the water can be obtained, his legal right to withdraw at any time has little meaning. Ordinarily all farmers that require irrigation and live in the area served by the company are members.

Voting in a mutual irrigation company may be on the basis of one-man, one-vote or on the basis of stock. Most frequently it is on the basis of stock. However, this basis of voting in these companies does not carry the same significance as in most business corporations or even in cooperatives of other types.

Since an irrigation company uses its stock as a basis for allocating water, it follows that the company distributes its stock among the farmers in proportion to their patronage. Thus voting on the basis of stock, in this case, means also voting on the basis of patronage.

Management of a mutual irrigation company is vested in a board of directors elected by members. The board makes rules and regulations for operating the irrigation system and distributing water to the users. It formulates administrative policies and hires employees to carry them out. Usually

Table 16.—Number of farmer mutual irrigation companies, farmers served, and area irrigated, by States, 1959 ¹

State	Mutual companies	Farmers served	Acres irrigated
		<i>Number</i>	
Arizona.....	76	6, 389	326, 367
California.....	816	24, 079	1, 110, 079
Colorado.....	1, 903	32, 014	2, 482, 696
Idaho.....	864	23, 568	1, 507, 224
Kansas and Oklahoma.....	10	307	45, 774
Montana.....	990	8, 353	854, 162
Nebraska.....	26	791	64, 742
Nevada.....	103	1, 286	128, 378
New Mexico.....	420	9, 856	134, 438
Oregon.....	588	5, 597	339, 139
South Dakota.....	20	233	16, 952
Texas.....	29	384	44, 670
Utah.....	967	38, 787	990, 043
Washington.....	275	4, 945	107, 137
Wyoming.....	634	4, 861	618, 767
Other.....	5	285	29, 502
Total.....	7, 726	161, 735	8, 800, 070

¹ U.S. Bureau of the Census. Irrigation of Agricultural Lands. U.S. Census of Agriculture. Vol. 3, 1959.

the president or the secretary of the board is designated as manager of the company. This office then has general supervision over all the activities of the company, including operation and maintenance, construction, financing, membership relations, and contacts with other organizations.

Show Accomplishments

The most recent statistical information pertaining to mutual irrigation systems is that collected by the Bureau of the Census. Data assembled in 1959 show that 7,726 such companies were operating that year. Approximately one-third of these associations were incorporated. Altogether they served 161,735 farmers and irrigated almost 9 million acres of land.

States with the largest number of companies were Colorado with 1903; Montana, 990; Utah, 967; Idaho, 864; California, 816; Wyoming, 634; and Oregon, 588 (table 16).

The mutual companies have more than \$300 million invested in facilities. These facilities include such things as storage reservoirs, dams, canals, conduits, pipelines, and pumping plants.

Mutual irrigation in the past has been confined largely to the 18 Western States where irrigation needs have been greatest. With the development of supplemental irrigation that has occurred in many Midwestern and Eastern States in recent years, mutual companies may sooner or later find a place in these areas.

Soil Conservation

LOCAL farmer-organized and farmer-managed soil conservation districts work at conserving the soil in all States and Puerto Rico. They operate watershed protection and flood prevention projects in many parts of the country.

Such districts cooperate with the U.S. Department of Agriculture's Soil Conservation Service in these projects.

Formation of soil conservation districts makes possible effective cooperative group action so essential in conservation of agricultural land. Responsibility for formulating the local program and carrying it forward is in the hands of the people who have most at stake.

The Soil Conservation Service, the U.S. Department of Agriculture's action agency in soil and water conservation, began assisting farmers and ranchers through districts when the first ones were organized in 1937. The small watershed protection program was started in 1953.

Soil conservation districts are established by initiative and referendum of local people under State authorizing laws. All States and Puerto Rico have district enabling laws. Soil conservation districts are formed by local landowners and operators. They register their wants first by a petition and later by a popular vote.

Local farmers and ranchers elected to the district's governing body manage the districts. In applying a conservation program to the land, district supervisors base their work programs on needs of the community and problems individ-

ual farmers and ranchers confront.

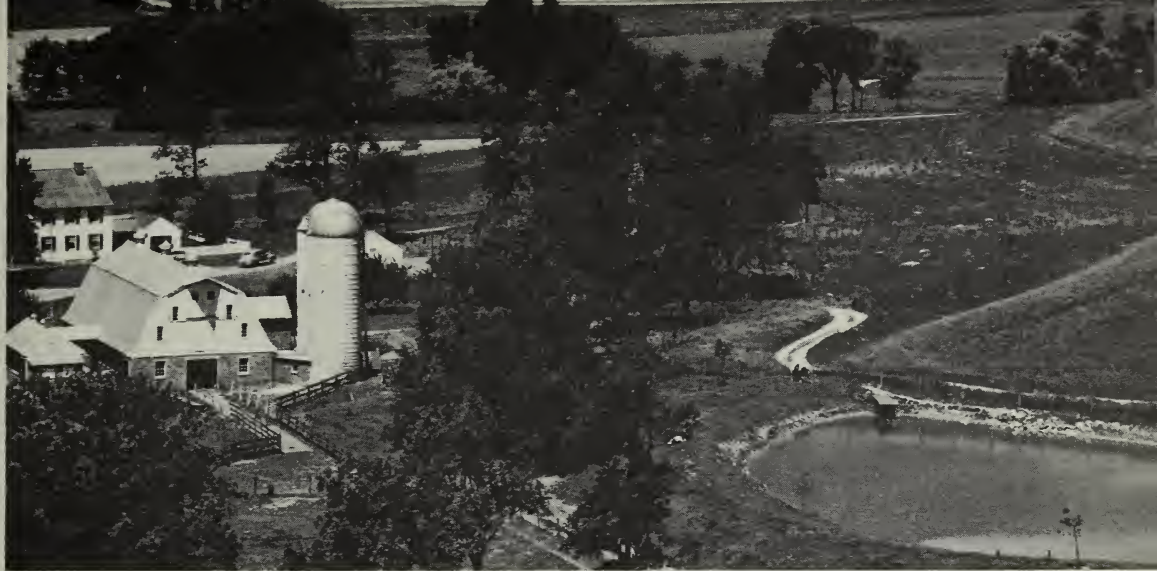
Other advantages available to individual farmers and ranchers through district organization are: (1) Technical assistance in working out and applying practical conservation farm plans; (2) use of special conservation equipment that individuals find difficult or costly to obtain; and (3) materials, such as seed or planting stock of special erosion-control plants not easily obtained otherwise.

As of June 1, 1963, there were 2,939 soil conservation districts in the United States. These embraced more than 3.6 million farms and ranches covering over 1.7 billion acres, or approximately 97 percent of the farms and ranches in the Nation.

Watershed Programs

Through a local watershed organization, the people are in a position to work together to improve an entire community by managing land and water resources. By initiating and carrying out a watershed program, local people demonstrate that they are eager to protect and to accept the custody of their natural resources. Immediate goals are to improve land use, stabilize water supplies, and reduce upstream flood damage, reservoir silting, soil erosion, and stream damage.

In each case, some responsible local organization (often a soil conservation district) must initiate the project and give active sponsorship to it. In addition to initiating the program of watershed protection and flood prevention, the watershed organization accepts the responsibility for adapting



The Soil Conservation Service, working through farmer-organized and farmer-managed soil conservation districts, encourages and helps farmers to conserve soil and water resources by the use of farm ponds, diversion terraces, and contour strip farming practices—all of these illustrated in this farm scene in Frederick County, Maryland.

plans to local requirements, sharing costs, and making provisions for applying and maintaining measures needed for soil and water conservation and flood prevention.

As of July 1, 1963, a total of 1,936 applications had been received by the U.S. Department of

Agriculture for help in developing watershed work plans. The Soil Conservation Service had authorized planning work in 890 of the watersheds in 48 States and Puerto Rico. The watersheds range in size from approximately 1,000 to 250,000 acres.

Electricity

RURAL electric cooperatives have taken the lead in bringing electric power and light to rural America and now are serving about half of the Nation's farms.

Few events have meant as much to rural America as the coming of electricity. First there were electric lights, then the radio, the electric iron, the washing machine, and the electric refrigerator. They came in about this order. They helped to lighten the workload of the housewife and made the rural home a more pleasant place to live.

Outside the home, electric power was put to work sawing wood, pumping water, mixing feed, milking cows, hatching eggs, brooding

chicks, warming pigs, moving grain, and performing many other tasks that previously had been done by hand labor.

Thus, electricity supplied by the rural electric cooperatives has helped the increasing productivity of farm labor that has characterized American agriculture in recent years.

By 1964, approximately 98 percent of the Nation's farms were electrified. This compares with about 11 percent in 1935 when the rural electrification program was started. Much of this increase has resulted, either directly or indirectly, from activities of the rural electric cooperatives.



Electric power lines no longer stick to main highways. Many now cut across fields and even ponds of water in seeking the shortest route to the farms they serve. Rural electric cooperatives have pledged themselves to a program of area coverage. This means serving all farms and other unserved rural establishments within the cooperative's territory. More than 98 percent of the Nation's farms now have electric power available.

REA Established

The story of rural electric cooperatives is to a large extent the story of the Rural Electrification Administration (REA), in the U.S. Department of Agriculture. Attempts had been made in some of the North Central States and in the Pacific Northwest to set up electric cooperatives to serve farmers before the Federal Government established a rural electrification lending program in 1935. All of these early cooperatives were very small and only a few were successful.

Principal difficulties encountered in these early attempts were lack of capital, inability or unwillingness of producers to supply power,

and unfavorable State laws. Also there was a lack of understanding of cooperative principles, practices, and benefits.

After passage of the Emergency Relief Appropriations Act, the President by Executive Order created the Rural Electrification Administration, May 11, 1935, "to initiate, formulate, administer, and supervise a program of approved projects with respect to the generation, transmission, and distribution of electric energy in rural areas."

The Rural Electrification Act of 1936 continued the program started under the emergency relief legislation. This Act originally provided for a 10-year program of electrification of rural areas which is de-

Table 17.—Rural electrification systems: Number, miles of line energized, and patrons served at specified dates, 1935–62 ¹

As of December 31	Systems	Miles energized	Patrons
		<i>Number</i>	
1935.....	2	0	0
1940.....	685	267, 846	674, 495
1945.....	848	449, 579	1, 408, 918
1950.....	1, 007	1, 088, 777	3, 413, 407
1955.....	1, 026	1, 361, 605	4, 251, 250
1960.....	1, 038	1, 465, 315	4, 825, 802
1961.....	1, 038	1, 483, 021	4, 955, 642
1962.....	1, 042	1, 504, 228	5, 094, 953
1963.....	1, 046	1, 526, 812	5, 237, 912

¹ Rural Electrification Administration, U.S. Department of Agriculture.

fined “to include both the farm and nonfarm population thereof.” It made funds available for lending for “the construction and operation of generating plants, electric transmission and distribution lines or systems.” Section 5 of the Act authorizes loans for financing house wiring and for installing plumbing as well as electrical equipment.

Preference was specified in the Act for applications from cooperative and nonprofit associations. In 1944, Congress removed the 10-year limit and amended the Act to extend the amortization period for construction loans from 25 years to 35 years. The interest rate, which had varied from year to year, was set at 2 percent. Congress annually authorizes funds for REA loans.

The Rural Electrification Administration makes no grants of funds; and it does not construct, own, or operate any electric facilities.

Loans are secured by a mortgage upon all the property procured and constructed with Government funds. REA supports the security of its loans by providing to its borrowers technical assistance in engineering, accounting, and management improvement.

Typical REA-Financed System

A typical REA borrower is a rural electric cooperative with about 1,500 miles of line serving slightly more than 5,000 members. Most of them are farmers but a sizable number are commercial, industrial, and community users—stores, filling stations, a small factory or two, schools, churches, and other rural establishments. The system may also serve a few small villages.

Table 17 shows number of REA electrification borrowers, miles energized, and number of patrons.

Over 90 percent of REA’s loan funds for rural electrification have gone to cooperatives. As of December 31, 1963, loans to distribution-type cooperatives amounted to \$3,657,501,366. In addition, loans to generation and transmission cooperatives amounted to \$1,069,685,153.

There were 917 distribution cooperatives on December 31, 1963. Of these, 912 were in operation with 1,420,748 miles of line serving 4,843,944 patrons. All of the cooperatives are local, independent, private business enterprises, incorpo-

rated under the laws of the States in which they operate.

A board of directors elected by the membership at the annual meeting guides affairs of rural electric cooperatives. The board hires a manager to operate the business.

An average cooperative would have 29 employees, all local residents. The headquarters building is one of the rural community's modern structures, and the cooperative paid \$29,763 in local taxes in 1963.

Rural electric cooperatives are nonprofit enterprises. Net margins from operations are credited to patrons as contributed capital and repaid after a number of years, as the financial condition of the cooperative permits. Average net worth of all rural electric cooperatives was 23.5 percent of total assets at the end of 1963.

Consumers on the lines of these rural systems double their use of power about every 7 years, and the cooperatives have continued to make rate reductions until the average retail charge is now down to about 2.26 cents per kilowatt hour.

Organized National Association

The rural electric cooperatives have organized statewide associations and a national association to help them with legislative, educational and policy matters. The National Rural Electric Cooperative Association (NRECA), is located in Washington, D.C.

NRECA's program of management services includes a series of institutes, technical workshops, and consultation services, carried on at various locations throughout the United States so that cooperative managers can enroll at the most convenient time and place.

The NRECA also has helped to develop employee group insurance programs, an employee pension program, and a fire and casualty insurance pooling arrangement for the benefit of its member cooperatives. The Association also publishes a monthly magazine, *Rural Electrification*, and distributes other educational material.

Telephones

THE first farm mutual telephone companies in this country were organized around 1900. Before that time, very few farmers had telephones. From about 1880, when the first commercial telephone companies were organized, until the first patent rights expired in 1894, telephone lines were confined almost exclusively to larger cities.

With the expiration of the patent rights, numerous manufacturing concerns and independent promoters quickly came into existence. First, telephone lines were built in

the smaller cities and towns and then in rural areas.

To speed up the service and hold cost to a minimum, farmers began organizing mutual companies to build their own lines. A few early trials here and there proved that it could be done and that the telephone was not really a "dangerous electrical contraption" as some had feared.

Harvey Hull, a former general manager of the Indiana Farm Bureau Cooperative Association, Indianapolis, once related his recollections of an early pioneer line

that his father had helped to build. It was one of the first—at least in his area.

Mutual Formed

The farmers set up a mutual company and built the line themselves. Each farmer contributed \$25 to a fund used to buy the wire, brackets, and insulators. Then working together they dug the holes, set the poles, and strung the wire. But when the line was completed, some hesitated to connect their telephones to it for fear it would draw in lightning and set the house on fire.

Others delayed using their phones until it could be demonstrated that they were not dangerous. But these fears soon were overcome and, before long, all the people in the neighborhood could talk to each other from their own living rooms, and this, it seemed, was a modern miracle.

The phone served many purposes—both business and social—but the one Mr. Hull remembered best was the Saturday night orchestra. At an appointed time, each telephone's receiver was lifted off the hook and the music started.

Someone began with a violin solo. When he finished, the guitar player had his turn—followed by the banjo player and others in succession—one by one.

"Sometimes they all played together," said Mr. Hull, and remembering back to his boyhood days after a lapse of almost half a century, added: "It was pretty good—sounded somewhat like an orchestra."

Between 1900 and 1910, thousands of mutual companies came into existence throughout the Mid-

west and in other parts of the country as well. The development declined in the late 1920's.

To expand their market, manufacturers of telephone equipment encouraged the development of mutual companies in rural areas. Some of them published circulars and bulletins telling farmers how to organize a mutual telephone company. Salesmen sometimes picked up the idea and carried it to farmers.

Sometimes the advice farmers got from this source was good, but frequently it was not. Many companies were set up without adequate bookkeeping records. They purposely held their rates low—in most instances just enough to pay current operating costs. A rate of 25 cents a month was not uncommon, and this was used to pay for switchboard service.

These early companies accumulated no reserves—no funds to offset depreciation. When the lines deteriorated and became useless, the capital was gone. Farmers then faced the problem of starting all over again—raising new capital and building a new line or abandoning the enterprise.

Very few rural telephone lines were properly maintained during the depression years of the 1930's. Some lines were completely abandoned, but most of them remained in operation even though service on them frequently was very poor.

Construction of rural electric lines set up inductive currents which rendered the magnetic telephone too noisy to be of further service.

With the upsurge in agricultural production as a part of the war effort in the early 1940's, farmers

began to need and demand better telephone resources. However, the scarcity of materials and labor held development of new lines and rehabilitation of old lines to a minimum during the war years.

Demand for Better Service

In the postwar period, farmers renewed their efforts for better rural telephone service. In many communities they were not willing to go back to old-type mutuals with one-wire lines, hand-cranking telephones, and party lines that served in some cases 20 or more families. They wanted modern up-to-date telephone service—the type available to urban residents.

By this time, it was becoming obvious that most of the old lines would have to be rebuilt and that substantial amounts of new capital would be needed to provide farmers with the type of service they now needed.

In 1949, Congress amended the Rural Electrification Act authorizing the REA to make loans for extending and improving telephone service in rural areas. The Act authorized the REA Administrator to make self-liquidating loans at an interest rate of 2 percent and for periods up to 35 years—the same terms that were being used in REA's electric program.

In administering the Act, REA has required that borrowers be of sufficient size to justify the use of modern dial equipment. This has brought about a tremendous number of consolidations and mergers on the part of old mutual companies, resulting in fewer but larger and stronger cooperatives.

Where the mutual lines could not get together in cooperatives of sufficient size, the franchise and

equipment often were purchased by privately owned companies other than cooperatives. These then obtained an REA loan and modernized the system.

Extent of Program

From the beginning of the program in 1950 to December 31, 1963, REA had approved loans totaling \$1 billion to 821 borrowers.

Of these, 218 were subscriber-owned cooperatives, with loans totaling \$348,707,595. With these funds, the cooperatives proposed to serve 537,459 patrons with 205,833 miles of line.

How many of the old mutuals have been able to keep their lines in service with financing from other sources is not known—though there are still some of these.

The proportion of farms with telephones increased from 38 percent in 1950 to 76 percent in 1963. Much of this increase can be traced directly to the REA-financed telephone program. Practically all of the REA-financed systems are modern dial.

REA provides technical assistance to its telephone borrowers in engineering, accounting, and management improvement, including member relations for cooperatives. Standardization and technical developments sponsored by REA in cooperation with the telephone industry and manufacturers of equipment and materials have brought down construction and maintenance costs for rural telephone systems. Buried plant, subscriber carrier and other engineering innovations sponsored by REA make telephone service feasible to remote farms and isolated communities.

Telephone rates in rural areas are higher than they were prior to the

REA lending program, but the quality of the service has improved beyond comparison. Some REA borrowers are now converting to 1-party and 2-party service. The 8-party line with automatic dial and selective ringing, which seemed like such an improvement when REA introduced it at the start of the loan program, is no longer good enough for rural America.

Formed National Association

Mutual telephone companies have a national organization, the National Telephone Cooperative Association (NTCA) with head-

quarters in Washington, D.C.

NTCA offers its member systems a program of complete insurance coverage and employees' retirement compensation. Other services include legislative advice and liaison; contact with other groups in the telephone industry; and a program of management development and employee training.

NTCA publishes a monthly magazine, *Phone Call*, and sponsors regional and annual meetings in order that system managers, directors, and key employees may meet to discuss and solve mutual problems and learn to operate more effectively.

Health

IN a few rural areas where the number of doctors and medical facilities is inadequate, farmers and other rural residents have organized rural health cooperatives. Usually such cooperatives are organized for one or more of the following purposes: (1) To attract doctors; (2) to build and operate a health center; and (3) to develop and operate a prepayment plan of medical care adapted to the needs and wishes of local people.

Usually the health cooperative is a formal association organized on a nonprofit basis by users of the health service.

Cooperative health associations, like other cooperatives, are democratically organized and controlled. The members elect a board of directors who are responsible for carrying out general purposes and policies of the association. Professional matters, however, are left wholly to the doctors

with whom the board arranges for service.

Oldest Hospital Association

The Farmers Union Hospital Association at Elk City, Okla., organized in 1929, is the oldest rural cooperative hospital association in the United States. In 1931, this association opened a 20-bed hospital and clinic. After that time, the hospital center was enlarged until in 1962 it had facilities for more than 100 bed patients. Membership of the Farmers Union Hospital Association includes families scattered over a number of counties, with Elk City as one of the chief trading centers.

Through facilities of the association, many nonmember families also receive health services, but they are required to pay the customary fees for service prevailing in the community.

Hospital Administration

The business affairs of the cooperative hospital are administered by a business manager under supervision of the association's elected board of directors. Doctors comprising the hospital's staff have complete supervision of professional services; they are relieved

of all business responsibilities connected with the institution and its maintenance. The chief of staff serves on the association's board of directors as an adviser but has no vote.

The high cost of hospital facilities and the shortage of doctors have restricted the development of rural health cooperatives in recent years.

Dairy Herd Improvements

FARMERS have greatly increased the productivity of their dairy herds by establishing cooperatives for: (1) Weighing and testing milk; (2) providing high-grade bulls; and (3) supplying artificial breeding service.

Weigh and Test Milk

"Cow testing" has been practiced in the United States since 1905 when the first dairy herd improvement association was formed in Michigan. The purpose of testing is to determine the quantities of milk and butterfat produced by each cow in each member's herd. A supervisor keeps feed, production, income, and breeding records on each cow. Usually he spends 1 day a month with each herd, supervises the milking, and prepares reports on the performance of each cow. With such information, unprofitable cows can be eliminated.

For cows on test, the pounds of milk produced annually per cow increased from 7,189 in 1925 to 11,032 in 1962 and the pounds of butterfat from 284 to 426 (table 18).

There were 1,436 active dairy herd improvement associations at

the beginning of 1962 with 1,958,355 cows on test.

Provide High-Grade Bulls

The first association for the cooperative ownership of bulls in the United States was organized in Michigan in 1908 shortly after the first dairy herd improvement cooperative. The bull associations enabled farmers to have better bulls and thus help increase production of both milk and butterfat. Such associations have decreased in number and importance as a result of the growth of the artificial breeding program which in most areas replaces them.

Supply Artificial Breeding Service

One of the newer types of cooperatives, the dairy cattle artificial breeding association, has come to the forefront during recent years. Since 1938, when the first such association was organized, tremendous expansion has taken place in cooperative management of bull studs and in marketing semen from high-grade bulls.

This form of organization is expected to expand further and to

Table 18.—Growth of dairy herd improvement association work in the United States, 1925–62

Year (Jan. 1)	Asso- ciations	Herds on test	Cows on test	Average yearly production (calendar year)			
				Association cows		All cows milked in the United States	
				Milk	Butter- fat	Milk	Butter- fat
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
1925-----	732	18, 677	307, 073	7, 189	284	4, 218	165
1935-----	809	15, 573	364, 218	7, 977	322	4, 184	165
1945-----	949	20, 825	561, 587	8, 296	336	4, 897	190
1955-----	2, 288	41, 240	1, 333, 866	9, 502	375	5, 842	225
1956-----	2, 266	40, 984	1, 406, 306	9, 713	383	6, 090	233
1957-----	1, 700	41, 638	1, 479, 799	9, 894	389	6, 303	240
1958-----	1, 544	39, 985	1, 548, 884	10, 068	394	6, 585	249
1959-----	1, 500	40, 284	1, 607, 538	10, 327	401	6, 815	256
1960-----	1, 509	41, 293	1, 746, 752	-----	-----	7, 002	263
1961-----	1, 395	42, 558	1, 867, 469	10, 796	418	7, 223	271
1962-----	1, 436	42, 034	1, 958, 355	11, 032	426	7, 370	275

SOURCE: Agricultural Research Service, U.S. Department of Agriculture.

have far-reaching effects on the average quality of dairy animals and on the efficiency of milk production.

According to records of the Agricultural Research Service, U.S. Department of Agriculture, on January 1, 1963, there were 51 artificial breeding organizations in the United States. Of these, 39 were cooperatives that provided approximately 75 percent of all the artificial breeding service used by dairy farmers in 1962. They owned or leased more than 2,000 sires, served approximately 592,000 herds, and bred more than 5.9 million cows. In about 20 States, cooperatives provide the only source of artificial breeding service available to dairy farmers.

The States with the largest number of cows bred artificially include:

Wisconsin, Minnesota, Pennsylvania, New York, and Ohio.

Farmers obtain many advantages through these associations. By means of artificial insemination, a single bull is sufficient for several herds. Farmers with small herds who could not otherwise afford the services of outstanding sires can obtain them through the cooperative. It is possible to increase production greatly by keeping only bulls that can transmit high producing characteristics to future cows.

Most of the cooperatives are set up on a nonstock basis. They may be large centralized cooperatives, federations of locals, or independent locals. In either case both ownership and membership rest in the hands of farmers who use the service.

Grazing and Livestock

RANCHERS and farmers have set up grazing and livestock associations in various States to improve the quality of their pastures and facilitate grazing on the public domain.

Grazing Associations

Ranchers and farmers in about 10 States have organized cooperative grazing associations to work with the U.S. Forest Service and local government agencies in programs designed to improve grassland ranges—both public and private. Through these nonprofit cooperative associations, livestock producers have been able to improve both the quality and yield of their range pastures.

For the most part, cooperative grazing associations are located in the National Grasslands, where much of the land is in public ownership. But scattered through these public lands are numerous ranches and parcels of land privately owned. Grazing associations make it possible to include both types of land under broad regional pasture-improvement and pasture-management programs.

Cooperative grazing associations are incorporated under State law. They enter into grazing agreements with Government land-managing agencies and with owners of private land and, in turn, issue grazing permits to the users of this land. In this way, they can make optimum use of the range resource. In addition, they construct fences, water reservoirs, and

other facilities as needed. In some cases, they provide range riders, promote the use of purebred bulls, and in other ways help to provide good range-management programs.

Membership in the cooperative usually is limited to ranchers who live in, or near, the area managed by the cooperative and have adequate facilities and feed to carry their herds through the winter months. The typical grazing association is composed of about 80 members with herds that average less than 100 cows.

In areas where much of the public lands are administered by the U.S. Forest Service, this agency encourages the formation of cooperative grazing associations and works closely with them in promoting pasture control and other good range-management practices.

Livestock Associations

In some of the Western States, ranchers and farmers have set up livestock associations to work with the Bureau of Land Management, U.S. Department of Interior, to facilitate livestock grazing on the public domain.

There are several hundred of these associations. For the most part, they do not enter into grazing agreements and issue grazing permits as is the case with the cooperative grazing associations already mentioned. They do, however, perform many of the other services. For example, they make range improvements and assess the

cost equitably among the members. They set up bull standards and appoint a bull committee to inspect, grade, and approve bulls to be used on the range. In some cases, they hire range riders and purchase salt on a cooperative basis.

These associations have been instrumental in improving grazing conditions on the public domain and have helped to provide on-the-ground management of grazing programs administered by the Bureau of Land Management, under the Taylor Grazing Act of 1934.

Rural Credit Unions

FARMERS and other rural residents within the first 48 States have organized 681 rural credit unions. These cooperative-type savings and loan associations serve a two-fold purpose: (1) They promote thrift and savings by encouraging members to build up cash reserves, and (2) they provide a readily available source of credit for those members who need to borrow.

As of January 1, 1963, the 681 rural credit unions then operating reported 267,856 members, who had accumulated \$107,345,648 in share savings. Of this amount, \$97,031,266 had been loaned to members who found it necessary to borrow funds to meet farm production costs and family living expenses.

On a national basis, rural credit unions supply only a small part of the total credit farmers use. But in the 681 communities where rural credit unions now exist, they are performing a useful and worthwhile service. Some have accumulated share-savings of \$1 million or more and, in the communities they serve, are recognized as important financial institutions.

About half the rural credit unions now operating in the Nation have been sponsored by other types

of farmer cooperatives—chiefly by farm supply associations.

This is a logical combination. For example, the cooperative can help provide office space, management, and part-time personnel. On the other hand, the credit union can make loans to members of the cooperative when they need to buy farm supplies on credit. This helps the cooperative keep its accounts receivable lower than otherwise would be the case.

Other rural credit unions have been sponsored by general farm organizations, rural churches, and similar community groups.

Rural credit unions, like nonrural groups hold membership in State credit union leagues and the Credit Union National Association (CUNA), from which they receive a wide variety of services, as well as help with educational and legislative matters.

The only credit union in Alaska that might be classified as rural is the Matanuska Valley Federal Credit Union, organized in 1949 to serve employees and members of Matanuska Valley Farmers Cooperative Association. The Tonvak Credit Association finances native fishermen in the Dillingham area of Alaska.



The Hereford Texas Federal Credit Union now has 4,000 members and more than \$2.5 million in member savings. It began business in 1936 with \$124 capital. Capable management and active membership participation have made it one of the Nation's outstanding rural credit unions.

A range rider keeps an eye on his herd as it grazes. In some areas farmers and ranchers have organized cooperative grazing associations to improve range conditions and to make better use of pasture.



Other Service Cooperatives

AT one time or another, farmers have used cooperatives to provide many other services. Spray rings, threshing rings, neighborhood farm machinery cooperatives, handicraft associations, and farm women's markets are examples.

However, as farms became larger and more highly commercialized the need for this type of small neighborhood cooperative declined, and such associations are much less numerous today than a generation or two ago. The commercialized-type farmer of today owns much of the machinery he needs and some-

times hires certain jobs, such as grain combining and hay baling, done on a custom basis.

A new type of cooperative has received some attention in recent months in connection with the Rural Areas Development program of the U.S. Department of Agriculture. It has been suggested that neighboring farmers in certain areas might gain economic benefits by organizing a cooperative to provide recreational services to tourists or residents of nearby towns and cities. Such services could include opportunities for hunting, fishing, swimming, and picnicking.

Appendix

Appendix table 1.—Number ¹ and estimated memberships ² of farmer marketing, farm supply, and related service cooperatives, 1961-62 ³

[Classified according to major product handled or function performed]

Geographic division and State	Bean and pea (dry edible)		Cotton and cotton products		Dairy products		Fruit and vegetable		Grain ⁴	
	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships
<i>Number</i>										
Maine.....	—	—	—	—	2	1,800	7	3,190	—	—
New Hampshire.....	—	—	—	—	4	690	2	525	—	—
Vermont.....	—	—	—	—	14	7,555	—	—	—	—
Massachusetts.....	—	—	—	—	6	1,625	2	620	—	—
Rhode Island.....	—	—	—	—	1	555	—	—	—	—
Connecticut.....	—	—	—	—	5	1,715	2	45	—	—
New England.....	—	—	—	—	32	13,940	13	4,380	—	—
New York.....	—	—	—	—	120	31,955	21	5,180	1	(⁵)
New Jersey.....	—	(⁵)	—	—	8	2,240	17	3,170	—	—
Pennsylvania.....	—	—	—	—	45	21,100	16	2,950	—	—
Middle Atlantic.....	—	—	—	—	173	55,295	54	11,300	1	(⁵)
Ohio.....	—	—	—	—	31	29,545	7	1,795	95	57,320
Indiana.....	—	—	—	—	12	18,275	4	775	36	82,815
Illinois.....	—	—	—	—	38	18,510	8	400	174	81,920

Michigan.....	3	3, 670	---	---	25	25, 245	23	6, 845	22	17, 775
Wisconsin.....	---	---	---	---	282	73, 125	5	1, 000	2	1, 580
East North Central.....	3	3, 670	---	---	388	164, 700	56	10, 815	329	241, 410
Minnesota.....	---	---	---	---	394	105, 210	5	555	217	124, 710
Iowa.....	---	---	---	---	160	64, 150	3	410	256	119, 345
Missouri.....	---	---	(⁸)	2, 575	13	15, 790	6	275	30	26, 295
North Dakota.....	---	---	---	---	30	17, 035	2	195	289	99, 475
South Dakota.....	---	---	---	---	33	15, 005	---	---	139	68, 160
Nebraska.....	---	---	---	---	20	36, 985	1	225	181	86, 960
Kansas.....	---	---	---	---	12	27, 775	1	40	227	125, 220
West North Central.....	---	---	(⁸)	2, 575	662	281, 950	18	1, 700	1, 339	650, 165
Delaware.....	---	---	---	---	(⁸)	395	2	1, 215	---	---
Maryland.....	---	---	---	---	4	3, 555	3	490	---	---
Virginia.....	---	---	---	---	17	5, 090	12	425	2	620
West Virginia.....	---	---	---	---	4	1, 245	1	10	---	---
North Carolina.....	---	---	7	7, 590	13	1, 885	8	610	---	---
South Carolina.....	---	---	1	115	3	605	5	890	---	---
Georgia.....	---	---	3	68, 500	10	665	3	170	---	---
Florida.....	---	---	(⁸)	17, 550	9	320	64	16, 700	---	---
South Atlantic.....	---	---	5	93, 755	60	13, 760	98	20, 510	2	620
Kentucky.....	---	---	---	---	5	4, 505	6	1, 350	---	---
Tennessee.....	---	---	2	7, 200	7	8, 240	5	1, 940	---	---
Alabama.....	---	---	5	39, 965	1	35	3	145	---	---
Mississippi.....	---	---	47	32, 760	5	3, 245	1	70	5	305
East South Central.....	---	---	54	79, 925	18	16, 025	15	3, 505	5	305
Arkansas.....	---	---	7	5, 360	1	1, 320	6	895	4	9, 835
Louisiana.....	---	---	5	4, 165	4	1, 860	7	990	---	---
Oklahoma.....	---	---	55	29, 505	5	12, 550	2	45	82	53, 295
Texas.....	---	---	7	94, 120	10	5, 555	13	2, 965	61	23, 975
West South Central.....	---	---	407	133, 150	20	21, 285	28	4, 895	147	87, 105

(continued)

See end of table for footnote references.

Appendix table 1.—Number ¹ and estimated memberships ² of farmer marketing, farm supply, and related service cooperatives, 1961-62 ³—Continued

[Classified according to major product handled or function performed]

Geographic division and State	Bean and pea (dry edible)		Cotton and cotton products		Dairy products		Fruit and vegetable		Grain ⁴	
	Cooper- atives listed	Esti- mated member- ships	Cooper- atives listed	Esti- mated member- ships	Cooper- atives listed	Esti- mated member- ships	Cooper- atives listed	Esti- mated member- ships	Cooper- atives listed	Esti- mated member- ships
<i>Number</i>										
Montana.....	—	(⁵)	—	—	6	3, 895	2	180	51	23, 620
Idaho.....	1	1, 660	—	—	8	10, 980	6	2, 685	9	5, 325
Wyoming.....	2	2, 020	—	—	1	1, 895	—	—	4	1, 995
Colorado.....	4	6, 775	—	—	7	5, 280	19	2, 090	23	13, 900
New Mexico.....	1	180	22	6, 320	1	315	3	150	2	2, 460
Arizona.....	—	—	4	2, 830	3	315	6	285	—	—
Utah.....	—	—	—	—	9	2, 345	10	3, 705	5	900
Nevada.....	—	—	(⁶)	20	3	105	—	—	—	—
Mountain.....	8	4, 635	26	9, 170	38	24, 130	46	9, 095	94	48, 200
Washington.....	—	—	—	—	—	—	—	—	—	—
Oregon.....	1	565	—	—	17	4, 955	52	6, 235	34	11, 875
California.....	3	1, 085	35	8, 840	27	7, 230	⁹ 24	4, 975	15	5, 500
Pacific.....	4	1, 720	35	8, 840	68	3, 925	⁷ 241	30, 585	4	1, 400
Total (48 States).....	15	10, 025	527	327, 415	68	16, 110	317	41, 795	53	18, 775
Alaska.....	—	—	—	—	1, 459	607, 195	645	107, 995	1, 970	1, 046, 580
Hawaii.....	—	—	—	—	2	80	9	515	—	—
United States.....	15	10, 025	527	327, 415	1, 461	607, 275	654	108, 510	1, 970	1, 046, 580

Geographic division and State	Livestock		Nut ¹⁰		Poultry and poultry products		Rice ⁷		Sugar products ¹¹		
	Coop- eratives listed	Esti- mated mem- berships	Coop- eratives listed	Esti- mated mem- berships	Coop- eratives listed	Esti- mated mem- berships	Coop- eratives listed	Esti- mated mem- berships	Coop- eratives listed	Esti- mated mem- berships	
Number											
Maine-----											
New Hampshire-----											
Vermont-----											
Massachusetts-----	1	515							1	105	
Rhode Island-----											
Connecticut-----					2	670					
New England-----	1	515			2	670			1	105	
New York-----	3	22,560			5	690			1	95	
New Jersey-----	1	1,830			14	3,270					
Pennsylvania-----	2	2,200			8	14,245					
Middle Atlantic-----	6	26,590			27	18,205			1	95	
Ohio-----	5	79,055			8	20,100			2	430	
Indiana-----	4	67,685			1	10					
Illinois-----	22	75,310			1	40					
Michigan-----	7	23,350			4	1,310			7	3,265	
Wisconsin-----	90	63,810			2	3,700			1	350	
East North Central-----	128	309,210			16	25,160			10	4,045	
Minnesota-----	156	118,335			11	2,845			2	295	
Iowa-----	26	55,295			7	5,800			1	645	
Missouri-----	5	45,900			1	(⁶)					

See end of table for footnote references.

(continued)

Appendix table 1.—Number ¹ and estimated memberships ² of farmer marketing, farm supply, and related service cooperatives, 1961-62 ³—Continued

[Classified according to major product handled or function performed]

Geographic division and State	Livestock		Nut ¹⁰		Poultry and poultry products		Rice ⁷		Sugar products ¹¹	
	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships
<i>Number</i>										
North Dakota.....	30	24, 970	-----	-----	-----	-----	-----	-----	(⁸) 1	90
South Dakota.....	3	14, 935	-----	-----	-----	-----	-----	-----	3	130
Nebraska.....	3	30, 795	-----	-----	-----	-----	-----	-----	1	2, 000
Kansas.....	2	9, 150	-----	-----	-----	-----	-----	-----	-----	50
West North Central.....	225	299, 380	-----	-----	-----	-----	-----	-----	8	3, 210
Delaware.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Maryland.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Virginia.....	24	9, 315	-----	-----	-----	-----	-----	-----	-----	-----
West Virginia.....	10	2, 685	1	3, 245	2	6, 235	-----	-----	-----	-----
North Carolina.....	2	1, 385	(⁸)	9, 750	(⁸) 3	2, 105	-----	-----	-----	-----
South Carolina.....	2	1, 065	(⁸)	580	-----	175	-----	-----	-----	-----
Georgia.....	1	1, 300	(⁸)	18, 500	4	125	-----	-----	-----	-----
Florida.....	2	820	-----	-----	4	165	-----	-----	3	165
South Atlantic.....	41	16, 570	2	32, 075	14	8, 825	-----	-----	3	165
Kentucky.....	14	20, 570	-----	-----	1	125	-----	-----	1	10
Tennessee.....	3	10, 885	(⁸)	185	-----	-----	-----	-----	-----	-----

Appendix table 1.—Number ¹ and estimated memberships ² of farmer marketing, farm supply, and related service cooperatives, 1961-62 ³—Continued

[Classified according to major product handled or function performed]

Geographic division and State	Tobacco		Wool and mohair		Miscellaneous ¹²		Total marketing	
	Cooperatives listed	Estimated memberships ¹³	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships
<i>Number</i>								
Maine.....			1	500			10	5,490
New Hampshire.....							6	1,215
Vermont.....							14	7,555
Massachusetts.....	1	115	2	(⁶)			13	2,980
Rhode Island.....		135					1	555
Connecticut.....	(⁸)						9	2,565
New England.....	1	250	3	500			53	20,360
New York.....			3	285			159	64,720
New Jersey.....			1	500	5	3,955	42	11,045
Pennsylvania.....			29	6,845	1	415	101	47,755
Middle Atlantic.....			33	7,630	7	4,405	302	123,520
Ohio.....	1	925	1	3,935	1	10	160	193,115
Indiana.....	(⁸)	940					57	170,500
Illinois.....			(⁸)	240	3	155	246	176,575
Michigan.....			(⁸)	505	4	190	95	82,155
Wisconsin.....	2	2,005	1	5,700	3	220	388	151,490
East North Central.....	3	3,870	2	10,380	11	575	946	773,835
Minnesota.....			1	13,005	1	20	787	364,975
Iowa.....			(⁸)	8,840	3	1,325	456	255,810
Missouri.....		160	2	6,310			57	97,305
North Dakota.....	(⁸)		4	2,575			355	144,340
South Dakota.....			(⁸)	7,805	1	30	187	110,775

Appendix table 1.—Number ¹ and estimated memberships ² of farmer marketing, farm supply, and related service cooperatives, 1961-62 ³—Continued

[Classified according to major product handled or function performed]

Geographic division and State	Tobacco		Wool and mohair		Miscellaneous ¹²		Total marketing	
	Cooper- atives listed	Estimated member- ships ¹³	Cooper- atives listed	Estimated member- ships	Cooper- atives listed	Estimated member- ships	Cooper- atives listed	Estimated member- ships
Number								
Washington.....	-----	-----	(⁸)	935	5	190	114	27, 295
Oregon.....	-----	-----	1	950	3	235	74	22, 920
California.....	-----	-----	1	770	8	1, 980	359	90, 675
Pacific.....	-----	-----	2	2, 655	16	2, 405	547	140, 890
Total (48 States).....	30	245, 655	182	104, 715	60	12, 440	5, 609	3, 429, 965
Alaska.....	-----	-----	(⁸)	5	-----	-----	2	85
Hawaii.....	-----	-----	-----	-----	3	680	15	1, 310
United States.....	30	245, 655	182	104, 720	63	13, 120	5, 626	3, 431, 360
Geographic division and State	Farm supply		Service ¹⁵		Total			
	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships		
Number								
Maine.....	¹⁶ 6	12, 845	-----	-----	16	18, 335		
New Hampshire.....	¹⁶ 2	3, 545	-----	-----	8	4, 760		
Vermont.....	5	9, 310	5	945	24	17, 810		

Massachusetts-----	10	19	15, 995	2	60	34	19, 035
Rhode Island-----	(⁹)	12	1, 315	1	105	2	1, 975
Connecticut-----			7, 930	3	280	24	10, 775
New England-----	44		50, 940	11	1, 390	108	72, 690
New York-----	250		76, 090	5	1, 510	414	142, 320
New Jersey-----	27		14, 870	2	120	71	26, 035
Pennsylvania-----	88		117, 680	6	165	195	165, 600
Middle Atlantic-----	365		208, 640	13	1, 795	680	333, 955
Ohio-----	102		118, 725	5	995	267	312, 835
Indiana-----	73		246, 635	3	1, 410	133	418, 545
Illinois-----	153		270, 140	24	9, 855	423	456, 570
Michigan-----	99		83, 195	7	125	201	165, 475
Wisconsin-----	16 270		246, 730	17	1, 285	675	399, 505
East North Central-----	697		965, 425	56	13, 670	1, 699	1, 752, 930
Minnesota-----	16 339		230, 190	22	4, 960	1, 148	600, 125
Iowa-----	150		158, 845	1	100	607	414, 755
Missouri-----	156		338, 025	1	170	214	435, 500
North Dakota-----	137		84, 170	8	1, 020	500	229, 530
South Dakota-----	117		72, 930	1	25	305	183, 730
Nebraska-----	150		101, 625	7	1, 440	368	270, 575
Kansas-----	89		40, 675	2	130	334	214, 100
West North Central-----	1, 138		1, 026, 460	42	7, 845	3, 476	2, 348, 315
Delaware-----	12		25, 960	-----	-----	14	27, 570
Maryland-----	43		77, 075	5	435	60	93, 325
Virginia-----	77		191, 400	5	2, 485	159	247, 880
West Virginia-----	25		62, 805	3	125	77	71, 985
North Carolina-----	7		187, 385	9	1, 785	48	303, 050
South Carolina-----	2		44, 015	1	155	15	70, 440
Georgia-----	45		33, 425	2	670	70	142, 105
Florida-----	18		5, 880	1	5	103	45, 015
South Atlantic-----	229		627, 945	26	5, 660	546	1, 001, 370

See end of table for footnote references.

(continued)

Appendix table 1.—Number ¹ and estimated memberships ² of farmer marketing, farm supply, and related service cooperative, 1961-62 ³—Continued

[Classified according to major product handled or function performed]

Geographic division and State	Farm supply		Service ¹⁵		Total	
	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships	Cooperatives listed	Estimated memberships
<i>Number</i>						
Kentucky.....	52	131, 265	1	35	91	208, 800
Tennessee.....	88	65, 930	3	2, 510	135	118, 540
Alabama.....	39	36, 900	3	725	59	85, 770
Mississippi.....	63	107, 325	3	760	139	170, 840
East South Central.....	242	341, 420	10	4, 030	424	583, 950
Arkansas.....	48	37, 040	1	200	111	62, 730
Louisiana.....	15	3, 240	1	195	62	12, 820
Oklahoma.....	25	14, 775	1	680	173	145, 655
Texas.....	66	28, 820	23	5, 240	521	181, 270
West South Central.....	154	83, 875	26	6, 315	867	402, 475
Montana.....	84	39, 045	1	225	172	73, 040
Idaho.....	35	30, 695	1	1, 000	94	62, 560
Wyoming.....	9	2, 900			24	10, 925
Colorado.....	42	19, 465	4	165	107	54, 070
New Mexico.....	1	185	2	400	32	10, 240
Arizona.....	2	68, 470			16	72, 135
Utah.....	18	9, 395	3	680	67	28, 150
Nevada.....					5	305
Mountain.....	191	170, 155	11	2, 470	517	311, 425
Washington.....	64	89, 170	2	160	180	116, 625
Oregon.....	36	45, 120	2	100	112	68, 140

California-----	42	25, 160	6	715	407	116, 550
Pacific-----	142	159, 450	10	975	699	301, 315
Total (48 States)-----	3, 202	3, 634, 310	205	44, 150	9, 016	7, 108, 425
Alaska-----	4	380	2	40	2	85
Hawaii-----					21	1, 730
United States-----	3, 206	3, 634, 690	207	44, 190	9, 039	7, 110, 240

¹ Includes independent local cooperatives, federations, and centralized cooperatives.

² Includes members (those entitled to vote for directors) but does not include nonvoting patrons. (There is some duplication in these membership figures because many farmers belong to more than one cooperative.)

³ Preliminary data covering operations of cooperatives whose fiscal years ended during the period July 1, 1961, through June 30, 1962, with limited exceptions.

⁴ Includes soybeans, soybean meal, and soybean oil.

⁵ It is estimated that approximately 4,600 additional members affiliated with other types of cooperatives market dry beans. These include Colorado, 2,500; Michigan, 900; Montana, 200; and New York, 1,000.

⁶ No individual memberships.

⁷ Cooperatives performing specific services on a commodity are included. Incorporated local associations of a federation that performs the actual marketing or processing are counted.

⁸ The cooperative with which this membership is affiliated has

been counted in the State in which the cooperative maintains its headquarters.

⁹ Cooperatives that are temporarily inactive because of crop failures or for other reasons are included.

¹⁰ Membership of cooperatives marketing nuts fluctuates from year to year and is affected by the extent to which producers participate in price support or stabilization programs.

¹¹ Includes sugar, sugarcane, sugar beets, honey, maple syrup, molasses, and sorghum.

¹² Includes forest products, fur pelts, hay, hops, nursery stock, tung oil, coffee, and other farm products not separately classified.

¹³ Member-patrons.

¹⁴ Includes a statewide federation of county wool pools. Payment is made by the federation to the pool manager who is responsible for payment to the individual wool growers.

¹⁵ Includes cooperatives furnishing special marketing or related services.

¹⁶ Includes incorporated local cooperatives without facilities that are affiliated with an operating regional cooperative.

Appendix table 2.—Estimates of gross and net sales¹ of farmer marketing, farm supply, and related service cooperatives² by commodity groups, geographic divisions, and States, 1961-62³

Geographic division and State	Bean and pea (dry edible)				Cotton and products				Dairy products			
	Estimated number of cooperatives handling ⁴		Value of sales ⁵		Estimated number of cooperatives handling ⁴		Value of sales ⁵		Estimated number of cooperatives handling ⁴		Value of sales	
	Head- quarters in State	Head- quarters out of State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quarters in State	Head- quarters out of State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quarters in State	Head- quarters out of State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000
Maine.....									3	2	21, 623	21, 623
New Hampshire.....									4	3	14, 264	14, 264
Vermont.....									14	6	78, 105	77, 324
Massachusetts.....									6	3	21, 979	21, 979
Rhode Island.....									1	2	8, 102	8, 102
Connecticut.....									5	1	28, 427	28, 427
New England.....									33		172, 500	171, 719
New York.....	23		5, 368	3, 607					119	9	493, 595	300, 400
New Jersey.....									4	3	20, 905	13, 098
Pennsylvania.....	1	1	117	117					44	9	217, 682	195, 286
Middle Atlantic.....	24		5, 485	3, 724					167		732, 182	568, 784
Ohio.....									30	6	156, 640	144, 366
Indiana.....									12	11	93, 755	71, 579
Illinois.....									38	7	161, 538	110, 640
Michigan.....	18	18	13, 496	9, 640					28	6	221, 310	195, 447
Wisconsin.....									283	9	717, 751	459, 277
East North Central.....	18		13, 496	9, 640					391		1, 350, 994	981, 309

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Geographic division and State	Fruits and vegetables					Grain, soybeans, meal, and oil					Livestock and livestock products					
	Estimated number of cooperatives handling ⁴		Value of sales			Estimated number of cooperatives handling ⁴		Value of sales ⁶			Estimated number of cooperatives handling ⁴		Value of sales			
	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	
Maine.....	8	-----	8	5, 341	5, 341	1	1	2	374	374	-----	-----	-----	-----	-----	-----
New Hampshire.....	2	-----	2	959	959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Vermont.....	1	-----	1	2	2	-----	-----	-----	-----	(7)	1	-----	1	3	3	3
Massachusetts.....	2	-----	2	10, 331	10, 331	1	-----	1	(7)	(7)	-----	-----	-----	850	850	850
Rhode Island.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Connecticut.....	3	-----	3	897	897	-----	-----	-----	-----	-----	1	-----	1	38	38	38
New England.....	16	-----	-----	17, 530	17, 530	2	-----	-----	374	374	3	-----	-----	891	891	891
New York.....	25	1	26	59, 155	59, 155	82	-----	82	8, 582	5, 564	3	-----	3	19, 590	19, 590	19, 590
New Jersey.....	18	2	20	21, 719	21, 719	11	1	12	992	929	3	-----	3	4, 540	4, 540	4, 540
Pennsylvania.....	16	3	19	41, 595	41, 595	20	2	22	2, 143	1, 366	8	3	11	3, 404	3, 402	3, 402
Middle Atlantic.....	59	-----	-----	122, 469	122, 469	113	-----	-----	11, 717	7, 859	14	-----	-----	27, 534	27, 532	27, 532
Ohio.....	15	2	17	15, 445	15, 387	174	2	176	233, 382	134, 792	6	2	8	166, 398	161, 434	161, 434
Indiana.....	3	1	4	438	438	102	3	105	213, 299	123, 641	4	5	9	132, 457	131, 412	131, 412
Illinois.....	8	1	9	2, 543	2, 543	197	3	200	335, 790	251, 182	24	4	28	195, 722	184, 533	184, 533
Michigan.....	32	2	34	32, 129	32, 129	67	3	70	62, 222	33, 567	8	2	10	41, 466	41, 466	41, 466
Wisconsin.....	6	2	8	13, 250	13, 250	42	2	44	4, 993	4, 757	92	3	95	72, 008	47, 379	47, 379
East North Central.....	64	-----	-----	63, 805	63, 747	582	-----	-----	849, 686	547, 939	134	-----	-----	608, 051	566, 223	566, 223
Minnesota.....	7	-----	7	2, 438	2, 438	232	4	236	264, 392	185, 835	160	5	165	226, 774	175, 478	175, 478
Iowa.....	3	-----	3	530	530	295	2	297	304, 075	207, 025	40	9	49	131, 848	131, 338	131, 338

See end of table for footnote references.

(continued)

Appendix table 2.—Estimates of gross and net sales ¹ of farmer marketing, farm supply, and related service cooperatives ² by commodity groups, geographic divisions, and States, 1961-62 ³—Continued

Geographic division and State	Fruits and vegetables				Grain, soybeans, meal, and oil				Livestock and livestock products							
	Estimated number of cooperatives handling ⁴		Value of sales		Estimated number of cooperatives handling ⁴		Value of sales ⁵		Estimated number of cooperatives handling ⁴		Value of sales					
			Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000			Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000								
	Head- quarters in State	Head- quarters out of State	Total in State		Head- quarters in State	Head- quarters out of State	Total in State		Head- quarters in State	Head- quarters out of State	Total in State		Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000		
Missouri..... North Dakota..... South Dakota..... Nebraska..... Kansas.....	6	2	8	1,722	1,722	89	2	91	74,248	52,024	27	3	30	73,738	73,294	
	2		2	1,373	1,373	289	2	291	264,573	198,558	33	5	38	43,812	39,785	
						144	5	149	125,112	86,529	5	6	11	25,673	24,767	
	1		1	907	907	193	1	194	150,240	110,876	5	7	12	98,280	98,266	
	1		1	203	203	253	6	259	411,793	248,653	4	5	9	18,768	18,560	
West North Central..... Delaware..... Maryland..... Virginia..... West Virginia..... North Carolina..... South Carolina..... Georgia..... Florida.....	20			7,173	7,173	1,495			1,594,433	1,089,500	274			618,893	561,488	
	2		2	1,160	1,160	10	2	12	4,944	4,454						
	3		3	819	819	16	3	19	14,734	9,902						
	11		11	2,568	2,568	15		15	13,894	11,540	25		25	18,529	17,090	
South Atlantic..... Kentucky..... Tennessee..... Alabama..... Mississippi.....	1		1	13	13	2	1	3	477	428	10	2	12	2,719	2,555	
	10		10	2,334	2,334	2		2	2,925	2,781	4		4	3,235	3,213	
	7	1	8	2,614	2,614	1	1	2	732	696	3	1	4	592	586	
	3		3	708	708	6		6	3,737	2,860	1		1	799	799	
	64	1	65	245,682	165,062	2	2	4	1,241	763	2		2	4,548	4,548	
East South Central..... Kentucky..... Tennessee..... Alabama..... Mississippi.....	101			255,898	175,278	54			42,684	33,424	45			30,422	28,791	
	5		5	86	86	1	1	2	306	257	13	5	18	25,007	21,769	
	5		5	1,219	1,219	2		2	1,047	500	3		3	3,996	3,996	
	3		3	74	74	8	2	10	6,735	1,898	7	1	8	6,279	6,279	
East South Central.....	1		1	10	10	16		16	7,878	6,492	1		1	13,222	13,222	
	14			1,389	1,389	27			15,966	9,147	24			48,504	45,266	

Arkansas.....	7	1	8	2, 276	2, 276	10	10	35, 630	31, 743	2	1	3	425	366
Louisiana.....	7	---	7	959	959	2	2	595	595	---	2	2	525	447
Oklahoma.....	2	---	2	12	12	93	96	216, 537	105, 700	2	3	5	22, 601	21, 713
Texas.....	15	1	16	4, 456	4, 450	96	98	194, 049	107, 789	5	3	8	42, 989	39, 343
West South Central.....	31	---	---	7, 703	7, 697	201	---	446, 811	245, 827	9	---	---	66, 540	61, 869
Montana.....	2	---	2	708	708	53	55	88, 066	48, 888	4	6	10	25, 717	25, 343
Idaho.....	7	1	8	13, 009	13, 009	10	16	29, 702	18, 425	7	1	8	5, 916	5, 916
Wyoming.....	---	---	---	---	---	7	9	5, 487	2, 896	---	2	2	7, 243	7, 243
Colorado.....	20	---	20	13, 624	8, 663	28	33	47, 867	32, 808	2	3	5	52, 687	52, 687
New Mexico.....	3	---	3	1, 010	1, 010	6	7	7, 114	3, 517	1	2	3	4, 734	4, 695
Arizona.....	6	3	9	14, 759	4, 121	1	1	10	10	---	1	1	6, 804	6, 804
Utah.....	10	---	10	1, 998	1, 998	5	5	3, 274	1, 722	2	---	2	26, 553	26, 553
Nevada.....	---	---	---	---	---	---	---	---	---	---	2	2	1, 716	1, 716
Mountain.....	48	---	---	45, 108	29, 509	110	---	181, 520	108, 266	16	---	---	131, 370	130, 957
Washington.....	52	2	54	76, 472	62, 951	38	40	102, 198	85, 834	4	---	4	3, 443	3, 443
Oregon.....	23	4	27	82, 227	65, 856	20	23	40, 254	24, 366	2	2	4	2, 436	2, 436
California.....	232	---	232	707, 601	445, 901	7	8	9, 693	9, 637	3	1	4	80, 489	80, 140
Pacific.....	307	---	---	866, 300	574, 708	65	---	152, 145	119, 837	9	---	---	86, 368	86, 019
Total (48 States).....	660	---	---	1, 387, 375	999, 500	2, 649	---	3, 295, 336	2, 162, 173	528	---	---	1, 618, 573	1, 509, 036
Alaska.....	1	---	1	(⁶)	(⁶)	1	1	(⁶)	(⁶)	---	---	---	---	---
Hawaii.....	9	1	10	3, 132	2, 838	---	---	---	---	2	---	2	(⁶)	(⁶)
United States.....	670	---	---	1, 390, 507	1, 002, 338	2, 650	---	3, 295, 336	2, 162, 173	530	---	---	1, 618, 573	1, 509, 036

See end of table for footnote references.

(continued)

Appendix table 2.—Estimates of gross and net sales ¹ of farmer marketing, farm supply, and related service cooperatives ² by commodity groups, geographic divisions, and States, 1961-62 ³—Continued

Geographic division and State	Nuts					Poultry products					Rice					
	Estimated number of cooperatives handling ⁴			Value of sales ⁵		Estimated number of cooperatives handling ⁴			Value of sales		Estimated number of cooperatives handling ⁴			Value of sales ⁶		
	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	
Maine.....						2	1	3	894	894						
New Hampshire.....							3	3	2, 095	2, 041						
Vermont.....						1	1	2	140	140						
Massachusetts.....						2	1	3	7, 078	6, 828						
Rhode Island.....							1	1	1, 479	1, 479						
Connecticut.....						4	3	7	4, 211	3, 997						
New England.....						9			15, 897	15, 379						
New York.....						9		9	25, 704	25, 365						
New Jersey.....						14	2	16	22, 728	20, 857						
Pennsylvania.....						12	3	15	14, 278	13, 849						
Middle Atlantic.....						35			62, 710	60, 071						
Ohio.....						11	1	12	29, 034	18, 568						
Indiana.....						4		4	960	960						
Illinois.....						5	1	6	80	80						
Michigan.....						15		15	4, 365	4, 365						
Wisconsin.....						15	1	16	19, 606	17, 792						
East North Central.....						50			54, 045	41, 765						

Appendix table 2.—Estimates of gross and net sales¹ of farmer marketing, farm supply, and related service cooperatives² by commodity groups, geographic divisions, and States, 1961-62³—Continued

Geographic division and State	Nuts				Poultry products				Rice			
	Estimated number of cooperatives handling ⁴		Value of sales ⁵		Estimated number of cooperatives handling ⁴		Value of sales		Estimated number of cooperatives handling ⁴		Value of sales ⁵	
	Head- quar- ters in State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000
Wyoming.....												
Colorado.....					3	3	3,791	3,791				
New Mexico.....												
Arizona.....	1	1	63	63								
Utah.....					4	4	17,244	10,301				
Nevada.....					1	1	60	60				
Mountain.....			63	63	10		22,288	15,300				
Washington.....	1	1	122	122	1	2	18,667	17,921				
Oregon.....	5	5	3,035	3,035	2	5	13,768	11,312				
California.....	23	23	62,457	53,326	12	13	69,493	55,507	6	6	66,211	66,211
Pacific.....	28		65,614	56,483	15		101,928	84,740	6		66,211	66,211
Total (48 States).....	107		130,446	117,380	535		501,540	422,928	61		205,427	177,684
Alaska.....						1	(⁶)	(⁶)				
Hawaii.....					1	1	(⁶)	(⁶)				
United States.....	107		130,446	117,380	536		501,540	422,928	61		205,427	177,684

See end of table for footnote references.

(continued)

Geographic division and State	Sugar products					Tobacco					Wool and mohair						
	Estimated number of cooperatives handling ⁴			Value of sales		Estimated number of cooperatives handling ⁴			Value of sales ⁵		Estimated number of cooperatives handling ⁴			Value of sales			
	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000		
Maine..... New Hampshire..... Vermont..... Massachusetts..... Rhode Island..... Connecticut..... New England..... New York..... New Jersey..... Pennsylvania..... Middle Atlantic..... Ohio..... Indiana..... Illinois..... Michigan..... Wisconsin..... East North Central..... Minnesota..... Iowa.....											1	1	2		70	70	
	1		1	8	8	1		1	1,440	1,440	2			2	(⁶)	(⁶)	
							1	1	1,759	1,759							
	1			8	8	1			3,199	3,199	3				70	70	
	1		1	300	300						3	2	5	64	41	41	
											1		1	37	37	37	
											29			29	507	507	
	1			300	300						33				608	585	
	2		2	777	777		1	1	1,635	1,635	2			2	1,090	1,090	
						2	2	1,619	1,619	1			1	854	854		
											2	1	3	25	25		
7	1	8	11,959	11,959						88	2	2	4	88	88		
1		1	695	695	2		2	2,222	2,222	1			1	551	551		
10				13,431	13,431	2			5,476	5,476	8			2,608	2,608		
2		2	1,750	1,750	1,750						3	1	4	1,688	1,688		
1		1		8,104	8,104							1	1	1,226	1,226		

See end of table for footnote references.

(continued)

Arkansas.....	9																	1	1	2	38	38
Louisiana.....																				3	63	63
Oklahoma.....																				1	162	162
Texas.....																				3	647	647
West South Central.....	9																				910	910
Montana.....	5	1	6	16,720	20,677	20,677	16,720														1,632	1,632
Idaho.....	10	3	13	23,720	23,720	23,720	23,720														957	957
Wyoming.....	2		2	5,440	5,440	5,440	5,440														1,043	1,043
Colorado.....	2		2	36,232	36,232	36,232	36,232														446	446
New Mexico.....																						
Arizona.....		1	1	5	5	5	5														38	38
Utah.....	10		10	7,171	7,171	7,171	7,171														1,651	1,651
Nevada.....																					34	34
Mountain.....	29			89,288	89,288	89,288	89,288														5,801	5,801
Washington.....	1		1	13,650	13,650	13,650	13,650														193	193
Oregon.....	1	1	2	7,275	7,275	7,275	7,275														361	361
California.....	4		4	240,305	240,305	240,305	240,305														2,055	2,055
Pacific.....	6			261,230	261,230	261,230	261,230														2,609	2,609
Total (48 States).....	66			411,036	411,036	411,036	411,036	31													24,859	24,231
Alaska.....																					(6)	(6)
Hawaii.....		1	1	(10)	(10)	(10)	(10)														(6)	(6)
United States.....	66			411,036	411,036	411,036	411,036	31													24,859	24,231

See end of table for footnote references.

(continued)

Geographic division and State	Miscellaneous ¹¹				Total farm products marketed				Building materials				
	Value of sales				Value of sales ⁵				Value of sales				
	Estimated number of cooperatives handling ⁴		Total number of cooperatives handling ⁴		Estimated number of cooperatives handling ⁴		Total number of cooperatives handling ⁴		Estimated number of cooperatives handling ⁴		Total number of cooperatives handling ⁴		
	Head- quar- ters in State	Head- quar- ters out of State	Gross (includes interco- operative business) \$1,000	Net (excludes interco- operative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Gross (includes interco- operative business) \$1,000	Net (excludes interco- operative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Gross (includes interco- operative business) \$1,000	Net (excludes interco- operative business) \$1,000	
Maine.....					11	4	28,302	28,302	3	1	4	38	23
New Hampshire.....					6	6	17,318	17,264		1	1	1	1
Vermont.....					15	7	77,469	77,469	1	1	2	7	7
Massachusetts.....					15	4	41,686	41,436	6	1	7	210	138
Rhode Island.....					1	3	9,581	9,581					
Connecticut.....					10	5	35,332	35,118	7	1	8	75	75
New England.....					58		210,469	209,170	17			331	244
New York.....	26		1,916	1,881	242	12	614,274	475,903	190	1	191	10,042	4,444
New Jersey.....	1		206	206	48	6	71,127	61,386	15	1	16	1,321	570
Pennsylvania.....	2		288	288	123	17	280,014	256,410	55	3	58	3,457	1,141
Middle Atlantic.....	29		2,410	2,375	413		965,415	793,699	260			14,820	6,155
Ohio.....	4		610	610	237	14	605,011	478,659	121		121	7,788	5,085
Indiana.....	29		134	134	122	22	443,516	330,637	98	2	100	19,101	11,247
Illinois.....	5	1	601	601	271	16	696,299	549,604	121	3	124	9,271	5,148
Michigan.....	5		436	436	147	15	329,471	329,096	61	4	65	6,699	3,903
Wisconsin.....	6		6,044	6,044	432	16	837,120	551,967	109	2	111	3,545	2,355
East North Central.....	49		7,825	7,825	1,209		2,969,417	2,239,963	510			46,404	27,738

Minnesota.....	7	---	7	102	102	808	18	826	1,084,331	742,552	66	4	70	5,824	4,865
Iowa.....	3	---	3	55	55	485	19	504	694,298	517,757	219	7	226	19,427	16,934
Missouri.....	39	---	39	1,063	1,063	181	14	195	260,157	227,323	71	1	72	4,752	2,746
North Dakota.....	1	1	2	101	29	356	12	368	332,141	257,202	39	3	42	4,576	4,560
South Dakota.....	6	1	7	645	609	191	16	207	199,812	156,571	51	5	56	5,517	5,121
Nebraska.....	2	1	3	658	631	238	12	250	316,973	274,997	73	3	76	5,664	3,996
Kansas.....	3	---	3	58	58	272	18	290	504,176	340,617	76	3	79	5,188	3,082
West North Central.....	61	---	---	2,632	2,547	2,531	---	---	3,391,888	2,517,019	595	---	---	50,948	41,304
Delaware.....	4	---	4	241	241	12	2	14	10,214	9,724	6	---	6	132	132
Maryland.....	1	---	1	3	3	29	7	36	83,497	77,884	6	---	13	2,203	849
Virginia.....	1	---	1	35	35	96	9	105	146,167	141,945	11	2	3	29	29
West Virginia.....	1	---	1	10	10	52	11	63	21,427	20,986	2	1	3	3	3
North Carolina.....	2	---	2	10	10	38	3	41	149,972	149,179	1	2	3	3,023	1,365
South Carolina.....	---	---	---	---	---	15	5	20	32,582	32,401	1	1	2	1,020	728
Georgia.....	1	---	1	414	414	38	4	42	121,471	117,683	11	1	12	810	311
Florida.....	2	---	2	56	56	85	3	88	329,110	247,973	2	---	2	28	28
South Atlantic.....	11	---	---	759	789	365	---	---	894,440	797,775	34	---	---	7,245	3,442
Kentucky.....	---	---	---	---	---	39	14	53	122,516	114,554	6	---	6	93	93
Tennessee.....	3	---	3	66	66	51	8	59	60,652	59,310	33	1	34	1,908	1,259
Alabama.....	1	---	1	108	108	26	6	32	58,131	50,103	5	1	6	71	48
Mississippi.....	3	---	3	1,521	1,521	106	5	111	187,967	181,452	17	2	19	489	201
East South Central.....	7	---	---	1,695	1,695	222	---	---	429,266	405,424	61	---	---	2,561	1,601
Arkansas.....	---	---	---	---	---	65	7	72	138,177	132,432	22	3	25	1,890	817
Louisiana.....	---	---	---	---	---	48	5	53	74,493	69,360	5	---	5	133	118
Oklahoma.....	4	---	4	202	202	155	13	168	325,070	207,014	29	3	32	2,243	1,511
Texas.....	7	---	7	549	549	450	11	461	700,988	534,708	11	2	13	292	42
West South Central.....	11	---	---	751	751	718	---	---	1,238,728	943,514	67	---	---	4,558	2,488

See end of table for footnote references.

(continued)

Appendix table 2.—Estimates of gross and net sales ¹ of farmer marketing, farm supply, and related service cooperatives ² by commodity groups, geographic divisions, and States, 1961-62 ³—Continued

Geographic division and State	Miscellaneous ¹¹				Total farm products marketed				Building materials						
	Estimated number of cooperatives handling ⁴		Value of sales		Estimated number of cooperatives handling ⁴		Value of sales ⁵		Estimated number of cooperatives handling ⁴		Value of sales				
	Head-quarters in State	Head-quarters out of State	Total in State	Gross (includes intercooperative business) \$1,000	Net (excludes intercooperative business) \$1,000	Head-quarters in State	Head-quarters out of State	Total in State	Gross (includes intercooperative business) \$1,000	Net (excludes intercooperative business) \$1,000	Head-quarters in State	Head-quarters out of State	Total in State	Gross (includes intercooperative business) \$1,000	Net (excludes intercooperative business) \$1,000
Montana.....	1	1	2	82	37	88	13	101	137,530	97,315	17	1	18	797	797
Idaho.....	7	3	10	2,056	2,051	61	18	79	131,791	108,531	9	3	12	710	271
Wyoming.....	3	---	3	42	42	16	7	23	23,411	19,399	2	---	2	52	52
Colorado.....	---	---	---	---	---	65	12	77	184,026	163,161	12	1	13	927	552
New Mexico.....	---	---	---	---	---	29	9	38	40,871	32,008	2	1	3	69	33
Arizona.....	---	---	---	---	---	14	12	26	91,299	74,603	2	1	3	1,266	825
Utah.....	3	---	3	593	593	48	---	48	96,421	87,926	6	1	7	337	204
Nevada.....	---	---	---	---	---	5	3	8	5,775	5,775	---	---	---	---	---
Mountain.....	14	---	---	2,773	2,723	326	---	---	711,124	588,718	50	---	---	4,158	2,734
Washington.....	6	2	8	4,501	4,038	119	10	129	337,373	252,641	26	2	28	2,555	1,718
Oregon.....	11	1	12	4,137	2,891	82	15	97	208,444	159,739	20	2	22	1,677	799
California.....	10	1	11	20,202	19,392	362	6	368	1,622,956	1,239,860	29	2	31	7,463	6,801
Pacific.....	27	---	---	28,840	26,321	563	---	---	2,168,773	1,652,240	75	---	---	11,695	9,318
TOTAL (48 States).....	209	---	---	47,735	44,996	6,405	---	---	12,979,520	10,147,522	1,669	---	---	142,720	95,024
Alaska.....	---	---	---	---	---	2	2	4	3,385	3,385	1	---	1	(9)	(9)
Hawaii.....	3	---	3	2,134	2,134	15	3	18	9,751	9,457	2	---	2	(9)	(9)
United States.....	212	---	---	49,869	47,130	6,422	---	---	12,992,656	10,160,364	1,672	---	---	142,720	95,024

Geographic division and State	Containers and packaging supplies				Farm machinery and equipment				Feed							
	Estimated number of cooperatives handling ⁴				Value of sales				Estimated number of cooperatives handling ⁴				Value of sales			
	Value of sales				Estimated number of cooperatives handling ⁴				Value of sales				Estimated number of cooperatives handling ⁴			
	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	
Maine.....	6	1	7	1, 910	1, 910	3	2	5	389	386	4	2	6	10, 004	8, 966	
New Hampshire.....	2	2	4	12	12	2	2	4	11	11	1	3	4	3, 430	3, 430	
Vermont.....	4	2	6	252	252	4	3	7	151	151	5	2	7	6, 276	6, 109	
Massachusetts.....	7	---	7	160	160	4	4	8	156	112	11	---	11	16, 135	13, 961	
Rhode Island.....	---	---	---	---	---	---	1	1	(¹²)	(¹²)	---	2	2	1, 381	1, 265	
Connecticut.....	3	1	4	63	63	7	1	8	222	222	11	3	14	17, 166	15, 515	
New England.....	22	---	---	2, 397	2, 397	20	---	---	929	882	32	---	---	54, 779	49, 246	
New York.....	200	2	202	920	658	198	4	202	10, 863	5, 791	204	1	205	149, 191	100, 684	
New Jersey.....	32	1	33	1, 276	1, 228	19	3	22	1, 839	897	21	1	22	39, 919	30, 625	
Pennsylvania.....	59	1	60	1, 053	737	66	6	72	3, 527	2, 575	80	3	83	73, 564	53, 179	
Middle Atlantic.....	291	---	---	3, 249	2, 623	283	---	---	16, 229	9, 263	305	---	---	262, 674	184, 488	
Ohio.....	19	---	19	829	702	98	4	102	8, 156	5, 749	186	2	188	50, 077	34, 409	
Indiana.....	4	1	5	65	58	86	5	91	7, 857	5, 661	106	1	107	50, 713	28, 058	
Illinois.....	29	2	31	325	319	78	5	83	3, 323	2, 396	227	3	230	57, 887	39, 662	
Michigan.....	24	1	25	877	871	47	4	51	1, 974	1, 678	102	6	108	27, 028	20, 219	
Wisconsin.....	26	2	28	574	400	138	5	143	8, 613	6, 303	251	8	259	56, 554	39, 803	
East North Central.....	102	---	---	2, 670	2, 350	447	---	---	29, 923	21, 787	872	---	---	242, 259	162, 151	
Minnesota.....	66	3	69	2, 004	550	180	2	182	7, 959	5, 298	576	6	582	65, 760	47, 154	
Iowa.....	28	3	31	233	164	100	6	106	3, 232	2, 654	375	11	386	88, 937	62, 920	
Missouri.....	12	3	15	130	122	58	4	62	4, 125	2, 567	172	2	174	81, 284	48, 754	

(continued)

See end of table for footnote references.

Geographic division and State	Containers and packaging supplies				Farm machinery and equipment				Feed						
	Value of sales				Value of sales				Estimated number of cooperatives handling ⁴						
	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000
North Dakota..... South Dakota..... Nebraska..... Kansas.....	9	2	11	138	63	87	2	89	3,696	1,719	273	10	283	8,736	5,486
	7	3	10	89	48	51	2	53	2,572	1,514	185	12	197	13,841	10,357
	10	3	13	325	76	84	3	87	4,070	2,994	216	4	220	20,359	16,090
	6	3	9	229	119	82	3	85	3,684	2,691	252	9	261	36,961	29,135
	138			3,148	1,142	642			29,338	19,437	2,049			315,858	219,896
	1	1	2	32	32						10	2	12	5,823	4,918
	2		2	9	9	7	1	8	1,284	1,284	34	2	36	20,721	14,571
	11		11	132	132	10	3	13	1,610	1,399	65		65	32,989	26,657
	West Virginia.....	1		1	1	1	2	3	88	88	24	1	25	7,437	5,809
	North Carolina.....	7		7	181	151	4	3	7	2,536	1,894	6	2	8	27,809
South Carolina..... Georgia..... Florida.....	2	1	3	296	284	3	2	5	410	356	3	1	4	7,791	5,406
	4		4	44	44	17	1	18	961	461	44	1	45	21,649	10,261
	16		16	6,342	1,115	7	1	8	718	572	13	1	14	3,706	2,583
	44			7,037	1,768	50			7,607	6,054	199			127,925	90,574
Kentucky..... Tennessee..... Alabama..... Mississippi.....	3	1	4	12	12	7	3	10	414	178	45	2	47	13,920	10,844
	10		10	63	63	47	4	51	2,079	1,900	88	1	89	16,959	10,725
	4		4	51	51	7	2	9	180	151	38	1	39	12,475	7,703
	30		30	487	487	23	2	25	890	683	57	3	60	12,445	5,526
East South Central.....	47			613	613	84			3,563	2,912	228			55,799	34,798

Arkansas.....	16	1	17	545	532	18	4	22	570	331	42	3	45	25,249	11,935
Louisiana.....	11	---	11	144	144	4	---	4	67	62	18	1	19	1,522	924
Oklahoma.....	58	1	59	1,338	898	21	3	24	941	692	131	6	137	17,520	12,428
Texas.....	241	2	243	9,593	6,937	67	3	70	1,009	937	215	5	220	23,366	19,981
West South Central.....	326	---	---	11,620	8,511	110	---	---	2,587	2,022	406	---	---	67,657	45,288
Montana.....	3	---	3	7	7	29	1	30	1,559	567	54	3	57	4,378	3,518
Idaho.....	7	1	8	121	119	19	4	23	1,720	1,426	26	6	32	4,578	4,146
Wyoming.....	5	---	5	81	81	3	1	4	60	30	12	2	14	753	725
Colorado.....	17	1	18	1,576	993	29	1	30	819	642	45	1	46	6,852	5,505
New Mexico.....	15	2	17	861	571	3	1	4	158	157	7	1	8	1,440	1,324
Arizona.....	1	4	5	712	4	3	---	3	258	258	2	---	2	1,252	653
Utah.....	8	---	8	1,345	931	4	2	6	368	316	10	---	10	10,596	10,450
Nevada.....	---	---	---	---	---	---	---	---	---	---	1	---	1	2	2
Mountain.....	56	---	---	4,703	2,706	90	---	---	4,942	3,396	157	---	---	29,851	26,323
Washington.....	35	---	35	5,893	3,347	46	3	49	4,008	3,635	69	4	73	32,705	32,348
Oregon.....	7	1	8	560	434	30	4	34	4,542	4,029	39	4	43	22,507	21,250
California.....	52	1	53	18,144	2,520	25	4	29	1,502	1,418	35	1	36	67,401	67,344
Pacific.....	94	---	---	24,597	6,301	101	---	---	10,052	9,082	143	---	---	122,613	120,942
Total (48 States).....	1,120	---	---	60,034	28,411	1,827	---	---	105,170	74,835	4,391	---	---	1,279,415	933,686
Alaska.....	---	---	---	---	---	1	---	1	(⁶)	(⁶)	1	---	1	(⁶)	(⁶)
Hawaii.....	8	---	8	90	90	5	---	5	35	35	3	---	3	1,585	1,585
United States.....	1,128	---	---	60,124	28,501	1,833	---	---	105,205	74,870	4,395	---	---	1,281,000	935,271

(continued)

See end of table for footnote references.

Appendix table 2.—Estimates of gross and net sales ¹ of farmer marketing, farm supply, and related service cooperatives ² by commodity groups, geographic divisions, and States, 1961-62 ³—Continued

Geographic division and State	Fertilizer				Meats and groceries				Petroleum products							
	Estimated number of cooperatives handling ⁴		Value of sales		Estimated number of cooperatives handling ⁴		Value of sales		Estimated number of cooperatives handling ⁴		Value of sales					
			Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000			Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000			Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000				
Maine..... New Hampshire..... Vermont..... Massachusetts..... Rhode Island..... Connecticut..... New England..... New York..... New Jersey..... Pennsylvania..... Middle Atlantic..... Ohio..... Indiana..... Illinois..... Michigan..... Wisconsin..... East North Central.....	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	
	7	1	8	3,768	3,753	1	---	1	146	146	4	2	6	395	389	
	1	2	3	580	580	---	---	---	---	---	1	2	3	55	55	
	5	2	7	1,068	1,035	9	---	9	360	360	5	2	7	595	595	
	11	---	11	2,122	1,986	2	---	2	170	170	6	1	7	148	123	
	---	1	1	226	226	---	---	---	---	---	---	---	1	1	1	1
	8	2	10	1,661	1,506	---	---	---	---	---	---	3	1	4	28	28
	32	---	---	9,425	9,086	12	---	---	676	676	19	---	---	---	1,222	1,191
	203	2	205	24,518	13,104	6	---	6	169	169	65	2	67	39,043	25,312	
	27	2	29	5,138	2,861	1	---	1	10	10	10	1	11	7,040	4,645	
82	4	86	18,658	11,480	4	---	4	211	211	51	2	53	29,458	18,743		
312	---	---	48,314	27,445	11	---	---	390	390	126	---	---	---	75,541	48,700	
187	2	189	29,110	16,225	10	1	11	690	690	118	---	---	118	36,006	23,198	
105	3	108	36,973	20,175	8	---	8	428	428	91	2	93	57,917	40,352		
183	3	186	52,957	26,700	27	1	28	955	955	114	3	117	86,945	52,381		
110	6	116	14,433	9,885	21	2	23	5,278	3,837	80	4	84	21,592	14,388		
247	6	253	34,700	13,532	138	1	139	9,017	6,383	224	6	230	77,036	45,150		
832	---	---	168,173	86,517	204	---	---	16,368	12,293	627	---	---	---	279,496	175,469	

Minnesota.....	490	4	494	40,319	21,302	275	2	277	14,375	8,711	262	4	266	86,533	58,376
Iowa.....	352	8	380	47,767	24,521	49	3	52	1,079	1,079	199	7	206	104,814	62,484
Missouri.....	174	3	177	43,816	16,507	110	---	110	14,165	10,380	110	1	111	36,601	18,884
North Dakota.....	293	9	302	13,548	6,812	41	1	42	3,111	2,911	155	6	161	39,868	26,750
South Dakota.....	135	10	145	6,757	2,369	25	1	26	895	835	133	6	139	41,634	30,593
Nebraska.....	199	4	203	24,453	13,853	27	---	27	4,733	4,733	195	4	199	73,945	42,004
Kansas.....	218	5	223	26,385	13,692	32	1	33	4,613	4,613	244	2	246	80,652	44,934
West North Central.....	1,861	---	---	203,045	99,056	559	---	---	42,971	33,262	1,298	---	---	464,047	284,025
Delaware.....	11	4	15	2,504	1,804	---	---	---	---	---	2	1	3	1,721	1,425
Maryland.....	34	3	37	8,882	5,854	1	---	1	1	1	15	1	16	10,655	8,638
Virginia.....	66	2	68	12,984	9,799	8	---	8	3,325	3,325	23	1	24	11,179	8,621
West Virginia.....	24	2	26	2,927	2,232	1	---	1	1	1	2	1	3	1,370	836
North Carolina.....	7	3	10	9,562	5,662	4	---	4	435	435	1	2	3	907	322
South Carolina.....	3	2	5	3,190	1,956	---	---	---	---	---	---	1	1	195	136
Georgia.....	46	1	47	11,683	6,341	1	---	1	16	16	---	1	1	181	3
Florida.....	42	2	44	13,521	12,300	---	---	---	---	---	2	---	2	24	24
South Atlantic.....	233	---	---	65,253	45,948	15	---	---	3,778	3,778	45	---	---	26,232	20,005
Kentucky.....	49	3	52	7,513	5,084	---	---	---	---	---	8	1	9	3,005	1,996
Tennessee.....	89	2	91	21,998	10,357	1	---	1	9	9	81	2	83	8,538	3,824
Alabama.....	41	3	44	18,808	12,530	1	---	1	47	47	7	2	9	1,242	754
Mississippi.....	70	3	73	45,279	28,803	4	---	4	61	61	26	3	29	4,732	3,426
East South Central.....	249	---	---	93,598	56,774	6	---	---	117	117	122	---	---	17,517	10,000
Arkansas.....	57	7	64	13,014	8,802	5	---	5	140	140	37	4	41	8,544	4,637
Louisiana.....	31	3	34	5,506	4,502	---	---	---	---	---	4	---	4	444	444
Oklahoma.....	109	4	113	9,524	5,122	4	---	4	212	212	80	3	83	17,897	8,101
Texas.....	149	3	152	7,857	5,714	10	---	10	192	192	87	2	89	8,866	6,290
West South Central.....	346	---	---	35,901	24,140	19	---	---	544	544	208	---	---	35,751	19,472
Montana.....	78	3	81	2,876	1,450	8	---	8	564	564	101	2	103	19,199	12,627
Idaho.....	35	6	41	5,195	3,120	3	---	3	289	289	34	5	39	11,049	7,362
Wyoming.....	7	2	9	567	524	1	---	1	99	99	9	1	10	1,327	1,127

(continued)

See end of table for footnote references.

Appendix table 2.—Estimates of gross and net sales ¹ of farmer marketing, farm supply, and related service cooperatives ² by commodity groups, geographic divisions, and States, 1961-62 ³—Continued

Geographic division and State	Fertilizer				Meats and groceries				Petroleum products							
	Estimated number of cooperatives handling ⁴				Value of sales		Estimated number of cooperatives handling ⁴		Value of sales		Estimated number of cooperatives handling ⁴		Value of sales			
	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1,000	Net (excludes intercoop- erative business) \$1,000	
Colorado----- New Mexico----- Arizona----- Utah----- Nevada----- Mountain----- Washington----- Oregon----- California----- Pacific----- Total (48 States)----- Alaska----- Hawaii----- United States-----	50	2	52	4,132	2,022	5	-----	5	967	967	44	1	45	14,169	10,581	
	9	1	10	636	438	1	-----	1	113	113	2	1	3	568	171	
	4	4	8	1,045	558	-----	-----	-----	-----	-----	3	-----	3	318	204	
	15	1	16	2,244	1,631	4	-----	4	157	157	17	1	18	3,635	2,734	
	-----	1	1	4	3	1	-----	1	46	46	-----	-----	-----	-----	-----	
	198	-----	-----	16,699	9,746	23	-----	-----	2,235	2,235	210	-----	-----	-----	50,265	34,806
	75	3	78	12,347	8,165	12	-----	12	746	746	66	3	69	26,015	18,602	
	50	5	55	11,404	6,187	11	-----	11	724	724	36	4	40	17,212	9,854	
	114	2	116	17,285	13,224	5	-----	5	70	70	23	23	3	26	2,950	2,556
	239	-----	-----	41,036	27,576	28	-----	-----	1,540	1,540	125	-----	-----	-----	46,177	31,012
4,302	-----	-----	681,444	386,288	877	-----	-----	68,619	54,835	2,780	-----	-----	-----	996,248	624,680	
1	-----	1	(⁶)	(⁶)	1	-----	1	(⁶)	(⁶)	-----	-----	-----	-----	(⁶)	(⁶)	
11	-----	11	534	534	-----	-----	-----	-----	-----	-----	1	-----	1	(⁶)	(⁶)	
-----	-----	-----	681,978	386,822	-----	-----	-----	-----	68,619	54,835	2,781	-----	-----	-----	996,248	624,680
4,314	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Geographic division and State	Seed					Sprays and dusts (farm chemicals)					Miscellaneous supplies				
	Estimated number of cooperatives handling ⁴			Value of sales		Estimated number of cooperatives handling ⁴			Value of sales		Estimated number of cooperatives handling ⁴			Value of sales	
	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000
Maine.....	4	1	5	535	530	6	2	8	673	662	5	3	8	1, 109	1, 072
New Hampshire.....	1	2	3	213	213	1	2	3	172	172	3	3	6	391	391
Vermont.....	5	2	7	426	414	3	2	5	316	306	7	4	11	972	953
Massachusetts.....	9		9	800	752	9	1	10	753	685	10	3	13	2, 145	1, 346
Rhode Island.....		1	1	84	84		1	1	68	68		1	1	145	145
Connecticut.....	7	2	9	596	540	5	2	7	471	427	8	2	10	950	862
New England.....	26			2, 654	2, 533	24			2, 453	2, 320	33			5, 712	4, 769
New York.....	204	2	206	8, 123	4, 745	205	2	207	2, 845	1, 445	221	4	225	10, 622	4, 104
New Jersey.....	22	1	23	1, 510	849	26	2	28	408	268	20	2	22	2, 016	653
Pennsylvania.....	85	3	88	6, 562	4, 347	82	4	86	3, 978	2, 911	85	5	90	10, 911	7, 378
Middle Atlantic.....	311			16, 195	9, 941	313			7, 231	4, 624	326			23, 549	12, 135
Ohio.....	177	2	179	9, 381	5, 868	111		111	3, 308	1, 755	189	4	193	15, 686	11, 920
Indiana.....	108		108	5, 453	3, 636	91	2	93	3, 317	1, 635	113	6	119	13, 949	8, 476
Illinois.....	208	4	212	8, 550	6, 371	111	3	114	4, 087	2, 144	218	8	226	9, 125	5, 218
Michigan.....	99	6	105	3, 554	2, 735	79	3	82	2, 414	2, 023	107	10	117	6, 866	4, 997
Wisconsin.....	234	5	239	6, 559	4, 277	165	5	170	2, 725	1, 424	364	10	374	26, 295	16, 710
East North Central.....	826			33, 497	22, 887	557			15, 851	8, 981	991			71, 921	47, 321
Minnesota.....	426	3	429	7, 901	5, 467	298	4	302	2, 657	1, 705	584	6	590	34, 146	13, 039
Iowa.....	332	7	339	8, 925	6, 480	211	6	217	3, 463	1, 947	399	11	410	15, 324	8, 588
Missouri.....	160	1	161	9, 847	5, 743	91	3	94	2, 368	1, 136	122	5	127	22, 066	4, 897

See end of table for footnote references.

(continued)

Appendix table 2.—Estimates of gross and net sales ¹ of farmer marketing, farm supply, and related service cooperatives ² by commodity groups, geographic divisions, and States, 1961-62 ³—Continued

Geographic division and State	Seed				Sprays and dusts (farm chemicals)				Miscellaneous supplies						
	Estimated number of cooperatives handling ⁴				Value of sales		Estimated number of cooperatives handling ⁴		Value of sales		Estimated number of cooperatives handling ⁴		Value of sales		
	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000	Head- quar- ters in State	Head- quar- ters out of State	Total in State	Gross (includes intercoop- erative business) \$1, 000	Net (excludes intercoop- erative business) \$1, 000
North Dakota..... South Dakota..... Nebraska..... Kansas.....	274	9	283	3, 544	2, 669	230	6	236	1, 466	997	348	8	356	11, 517	8, 293
	150	9	159	2, 053	1, 461	104	7	111	955	572	217	9	226	8, 571	6, 310
	81	4	85	861	541	102	3	105	1, 923	979	221	4	225	10, 002	5, 763
	173	4	177	2, 108	1, 950	152	3	155	2, 390	1, 396	198	5	203	11, 047	7, 286
	1, 596	---	---	35, 239	24, 311	1, 188	---	---	15, 222	8, 732	2, 089	---	---	112, 673	54, 176
West North Central..... Delaware..... Maryland..... Virginia..... West Virginia..... North Carolina..... South Carolina..... Georgia..... Florida.....	10	3	13	859	716	1	2	3	126	126	10	2	12	2, 890	2, 433
	33	2	35	3, 186	2, 216	7	1	8	148	148	36	2	38	9, 676	6, 571
	63	---	63	4, 659	3, 660	13	2	15	1, 004	441	64	4	68	17, 372	11, 438
	23	1	24	1, 157	900	3	1	4	55	55	27	3	30	4, 066	3, 244
	6	1	7	3, 803	2, 580	7	2	9	2, 899	1, 501	8	3	11	9, 046	4, 738
	2	1	3	1, 831	1, 427	4	1	5	1, 470	1, 085	6	2	8	2, 175	1, 234
	46	---	46	2, 876	1, 817	43	1	44	2, 267	1, 290	30	2	32	7, 562	2, 614
	15	1	16	845	743	39	1	40	5, 004	4, 801	13	1	14	1, 619	1, 215
South Atlantic..... Kentucky..... Tennessee..... Alabama..... Mississippi.....	198	---	---	19, 216	14, 059	117	---	---	12, 973	9, 447	194	---	---	54, 406	33, 487
	45	1	46	2, 562	2, 077	8	1	9	149	149	45	5	50	7, 717	6, 164
	88	1	89	7, 350	4, 387	80	3	83	2, 665	1, 410	81	6	87	7, 966	2, 995
	42	1	43	3, 067	2, 105	37	3	40	1, 603	1, 111	32	4	36	4, 624	2, 095
East South Central.....	59	3	62	5, 164	3, 415	63	4	67	7, 348	6, 204	44	5	49	4, 211	1, 994
	234	---	---	18, 143	11, 984	188	---	---	11, 765	8, 874	202	---	---	24, 518	13, 248

Arkansas.....	43	2	45	2,807	1,763	32	6	38	1,533	693	37	6	43	3,777	1,658
Louisiana.....	17	1	18	733	671	16	1	17	1,228	1,115	11	---	11	215	199
Oklahoma.....	115	2	117	1,840	1,522	62	3	65	1,144	722	94	5	99	4,342	2,626
Texas.....	275	1	276	4,228	3,636	187	3	190	3,574	2,675	128	3	131	4,120	2,644
West South Central.....	450	---	---	9,608	7,592	297	---	---	7,479	5,205	270	---	---	12,454	7,127
Montana.....	35	3	38	661	442	85	2	87	879	664	105	2	107	5,873	4,459
Idaho.....	22	4	26	876	792	23	4	27	642	365	40	7	47	3,468	2,775
Wyoming.....	5	2	7	123	120	4	1	5	63	56	14	1	15	328	284
Colorado.....	37	---	37	651	504	44	1	45	1,320	551	60	1	61	2,869	2,199
New Mexico.....	6	---	6	92	92	5	1	6	143	29	5	1	6	214	55
Arizona.....	3	---	3	124	94	5	1	6	911	542	5	3	8	2,367	1,273
Utah.....	11	---	11	447	425	13	1	14	456	378	21	2	23	2,112	1,360
Nevada.....	---	---	---	---	---	---	---	---	---	---	1	---	1	2	2
Mountain.....	119	---	---	2,974	2,469	179	---	---	4,414	2,585	251	---	---	17,233	12,407
Washington.....	38	2	40	1,801	1,730	85	4	89	6,615	5,132	87	4	91	7,455	4,773
Oregon.....	34	2	36	1,723	1,553	50	3	53	2,614	2,037	66	6	72	6,645	4,019
California.....	64	2	66	1,891	1,845	89	3	92	5,338	4,279	67	5	72	4,981	2,241
Pacific.....	136	---	---	5,415	5,128	224	---	---	14,567	11,448	220	---	---	19,081	11,033
Total (48 States).....	3,896	---	---	142,941	100,904	3,087	---	---	91,955	62,216	4,576	---	---	341,547	195,703
Alaska.....	1	---	1	(^b)	(^b)	---	---	---	---	---	1	---	1	(^c)	(^c)
Hawaii.....	3	---	3	12	12	8	---	8	112	112	1	---	1	(^c)	(^c)
United States.....	3,900	---	---	142,953	100,916	3,095	---	---	92,067	62,328	4,578	---	---	341,547	195,703

(continued)

See end of table for footnote references.

Appendix table 2.—Estimates of gross and net sales ¹ of farmer marketing, farm supply, and related service cooperatives ² by commodity groups, geographic divisions, and States, 1961-62 ³—Continued

Geographic division and State	Total supplies				Services				Total			
	Estimated number of cooperatives handling ⁴			Value of sales		Estimated number of cooperatives handling ⁴			Estimated number of cooperatives in State	Estimated number of cooperatives doing business in State	Gross business \$1,000	Net business \$1,000
	Head-quarters in State	Head-quarters out of State	Total in State	Gross (includes inter-operative business) \$1,000	Net (excludes inter-operative business) \$1,000	Head-quarters in State	Head-quarters out of State	Total in State				
Maine.....	11	4	15	18,967	17,837	5	2	7	16	22	47,505	46,375
New Hampshire.....	6	4	10	5,252	4,865	2	2	4	8	15	22,746	22,305
Vermont.....	17	5	22	10,423	10,182	10	1	11	24	32	89,120	88,098
Massachusetts.....	25	4	29	22,799	19,433	6	1	7	34	40	64,862	61,246
Rhode Island.....		2	2	1,905	1,789	1	1	2	2	6	11,548	11,432
Connecticut.....	16	3	19	21,232	19,238	7	3	10	24	30	56,863	54,655
New England.....	75			80,578	73,344	31			108		292,644	284,111
New York.....	294	7	301	256,336	160,456	163	1	164	414	428	876,128	641,877
New Jersey.....	48	5	53	60,477	42,606	29	1	30	71	79	132,956	105,344
Pennsylvania.....	127	10	137	151,379	102,702	79	4	83	195	217	433,844	361,563
Middle Atlantic.....	469			468,192	305,764	271			680		1,442,928	1,108,784
Ohio.....	223	8	231	161,031	105,601	212	1	213	267	285	775,481	593,699
Indiana.....	121	9	130	195,773	119,726	108	2	110	133	159	645,630	456,704
Illinois.....	353	9	362	233,425	141,294	273	3	276	423	442	938,451	699,625
Michigan.....	151	13	164	90,715	64,536	110	2	112	201	225	481,574	397,020
Wisconsin.....	446	18	464	225,618	136,337	362	8	370	675	701	1,068,913	694,479
East North Central.....	1,294			906,562	567,494	1,065			1,699		3,910,049	2,841,527
Minnesota.....	930	12	942	267,478	166,467	734	5	739	1,148	1,172	1,368,531	925,741
Iowa.....	536	15	551	293,201	187,771	408	7	415	607	636	1,008,196	726,225

Missouri.....	195	9	204	219, 134	111, 736	129	5	134	3, 758	214	232	483, 049	342, 817
North Dakota.....	437	12	449	90, 200	60, 260	380	4	384	8, 830	500	519	431, 171	326, 202
South Dakota.....	282	14	296	82, 884	59, 180	216	7	223	5, 528	305	329	288, 224	221, 279
Nebraska.....	342	11	353	146, 335	91, 029	259	2	261	12, 363	368	386	475, 671	378, 389
Kansas.....	318	12	330	173, 257	108, 898	276	6	282	30, 261	334	357	707, 694	479, 776
West North Central.....	3, 040	-----	-----	1, 272, 489	785, 341	2, 402	-----	-----	98, 159	3, 476	-----	4, 762, 536	3, 400, 519
Delaware.....	14	5	19	13, 955	11, 454	10	1	11	47	14	19	24, 216	21, 225
Maryland.....	50	4	54	54, 694	39, 424	31	1	32	579	60	69	138, 770	117, 887
Virginia.....	92	6	98	87, 457	66, 321	65	3	68	1, 684	159	172	235, 308	209, 950
West Virginia.....	29	5	34	17, 131	13, 195	25	4	29	432	77	89	38, 990	34, 613
North Carolina.....	19	6	25	60, 201	39, 017	23	1	24	1, 174	48	57	211, 347	189, 370
South Carolina.....	7	4	11	18, 378	12, 612	4	2	6	416	15	22	51, 376	45, 429
Georgia.....	53	4	57	48, 049	23, 158	19	1	20	932	70	77	170, 452	141, 773
Florida.....	57	3	60	31, 807	23, 381	35	2	37	14, 354	103	108	375, 271	285, 708
South Atlantic.....	321	-----	-----	331, 672	228, 562	212	-----	-----	19, 618	546	-----	1, 245, 730	1, 045, 955
Kentucky.....	55	6	61	35, 385	26, 597	52	2	54	430	91	106	158, 331	141, 581
Tennessee.....	97	7	104	69, 535	36, 929	96	5	101	1, 668	135	147	131, 855	97, 907
Alabama.....	46	6	52	42, 168	26, 595	25	2	27	1, 427	59	70	101, 726	78, 130
Mississippi.....	105	7	112	81, 106	50, 800	91	3	94	3, 816	139	150	272, 889	236, 068
East South Central.....	303	-----	-----	228, 104	140, 921	264	-----	-----	7, 341	424	-----	664, 801	553, 686
Arkansas.....	71	12	83	58, 069	31, 308	55	4	59	5, 872	111	128	202, 118	169, 612
Louisiana.....	38	4	42	9, 992	8, 179	25	1	26	1, 164	62	70	85, 649	78, 703
Oklahoma.....	158	10	168	57, 001	33, 834	153	8	161	12, 787	173	191	394, 858	253, 635
Texas.....	424	10	434	63, 097	49, 048	446	4	450	44, 798	521	538	808, 883	628, 554
West South Central.....	691	-----	-----	188, 159	122, 369	679	-----	-----	64, 621	867	-----	1, 491, 508	1, 130, 504
Montana.....	136	4	140	36, 793	25, 095	90	1	91	2, 553	172	187	176, 876	124, 963
Idaho.....	61	8	69	28, 648	20, 665	33	8	41	2, 243	94	115	162, 682	131, 439
Wyoming.....	94	2	19	3, 453	3, 098	9	3	12	381	24	32	27, 245	22, 878
Colorado.....	94	3	97	34, 282	24, 516	62	6	68	3, 925	107	121	222, 233	191, 602
New Mexico.....	21	4	25	4, 294	2, 983	29	5	34	3, 192	32	42	48, 357	38, 183

See end of table for footnote references.

(continued)

Appendix table 2.—Estimates of gross and net sales ¹ of farmer marketing, farm supply, and related service cooperatives ² by commodity groups, geographic divisions, and States, 1961-62 ³—Continued

Geographic division and State	Total supplies			Services			Total						
	Estimated number of cooperatives handling ⁴			Value of sales		Estimated number of cooperatives handling ⁴			Estimated re- ceipts ¹³	Estimated number of coopera- tives in State	Estimated number of coopera- tives doing business in State	Gross business	Net busi- ness
	Head- quarters in State	Head- quarters out of State	Total in State	Gross (includes inter- operative business) \$1,000	Net (ex- cludes inter- operative business) \$1,000	Head- quarters in State	Head- quarters out of State	Total in State					
Arizona.....	8	5	13	8, 253	4, 411	5	6	11	2, 591	16	30	102, 143	81, 605
Utah.....	29	3	32	21, 697	18, 586	21	-----	21	2, 211	67	70	120, 329	108, 723
Nevada.....	1	1	2	54	53	1	1	2	49	5	9	5, 878	5, 877
Mountain.....	367	-----	-----	137, 474	99, 407	250	-----	-----	17, 145	517	-----	865, 743	705, 270
Washington.....	141	7	148	100, 140	80, 196	96	5	101	12, 213	180	192	449, 726	345, 050
Oregon.....	83	10	93	69, 608	50, 886	54	4	58	7, 391	112	133	285, 443	218, 016
California.....	181	6	187	127, 025	102, 298	158	3	161	30, 247	407	416	1, 780, 228	1, 372, 405
Pacific.....	405	-----	-----	296, 773	233, 380	308	-----	-----	49, 851	699	-----	2, 515, 397	1, 935, 471
Total (48 States).....	6, 965	-----	-----	3, 910, 093	2, 556, 582	5, 482	-----	-----	301, 723	9, 016	-----	17, 191, 336	13, 005, 827
Alaska.....	1	-----	1	(⁶)	(⁶)	1	-----	1	(⁶)	2	4	5, 807	5, 807
Hawaii.....	16	-----	16	2, 383	2, 383	12	-----	12	330	21	24	12, 464	12, 170
United States.....	6, 982	-----	-----	3, 912, 476	2, 558, 965	5, 495	-----	-----	302, 063	9, 039	-----	17, 209, 607	13, 023, 804

Appendix Table 2 Footnotes

¹ The value of products marketed is allocated to the State in which they originate and the value of farm supplies is allocated to the State in which they are sold.

² Includes independent local cooperatives, federations, and centralized cooperatives.
³ Preliminary data covering operations of cooperatives whose fiscal years ended during the period July 1, 1961, through June 30, 1962, with limited exceptions.

⁴ The total number of cooperatives handling each commodity within a State includes not only the cooperatives handling the commodity that have headquarters in that State, but all other cooperatives handling the commodity in that State whose headquarters are located in other States. Number of cooperatives handling a commodity include those performing specific services on the commodity, such as cotton ginning cooperatives, livestock trucking cooperatives, rice drying cooperatives, and fruit drying cooperatives. (Income for these specific services is included with service receipts.)

⁵ Includes the value of commodities marketed by cooperatives under price support program in 1961-62. Business volume is influenced by the extent to which producers participate in the program.

⁶ Value is included in total dollar volume of all farm products marketed, farm supplies handled, or services performed in order not to reveal separate commodity data for an individual association.

⁷ Value of grain allocated to State of origin.

⁸ Value of wool allocated to State of origin.

⁹ Includes the volume of a statewide federation of county wool pools which is responsible for selling all wool in the pools. Payment is made by the federation to the pool manager who is responsible for payments to the individual wool growers.

¹⁰ The volume of a sugar cooperative with headquarters in California whose business originated in Hawaii is included in the dollar volume of California.

¹¹ Includes forest products, fur pelts, hay, hops, nursery stock, tung oil, coffee, and other farm products not separately classified.

¹² Less than \$500.

¹³ Charges for services in which no duplication occurs.

Appendix table 3.—Farmers' Cooperatives: Types, numbers, and memberships, United States

Type	Year or date of data	Associations	Estimated memberships or participants
Marketing and farm supply:			
Marketing ¹ -----	1961-62-----	² 5, 626	3, 431, 360
Farm supply ¹ -----	1961-62-----	³ 3, 206	3, 634, 690
Miscellaneous services ^{1 4} -----	1961-62-----	⁵ 207	44, 190
Service:			
Federal land bank associations ⁶ -----	June 30, 1963-----	763	⁷ 361, 804
Production credit associations ⁶ -----	Jan. 1, 1964-----	484	535, 831
Banks for cooperatives ⁶ -----	June 30, 1963-----	13	⁸ 3, 733, 464
Rural credit unions ⁹ -----	Jan. 1, 1962-----	682	233, 054
Rural electric cooperatives ¹⁰ -----	Jan. 1, 1964-----	¹¹ 912	¹² 4, 843, 944
Rural telephone cooperatives ¹⁰ -----	Jan. 1, 1964-----	¹¹ 209	¹² 432, 446
Rural health cooperatives ¹³ -----	June 30, 1963-----	21	61, 921
Farmers' mutual fire insurance companies ¹⁴ -----	Jan. 1, 1964-----	1, 500	3, 500, 000
Production:			
Mutual irrigation companies ¹⁵ -----	1959-----	7, 729	161, 679
Dairy herd improvement associations ¹⁶ -----	Jan. 1, 1964-----	1, 420	67, 664
Dairy-cattle artificial breeding associations ¹⁶ -----	Jan. 1, 1964-----	¹⁷ 44	¹⁷ 459, 503

¹ Farmer Cooperative Service, Department of Agriculture.
² When associations marketing farm products but principally engaged in providing some other services are included, the total is 6,422.
³ When associations purchasing farm supplies but principally engaged in providing some other services are included, the total is 6,982.
⁴ Includes general trucking, storage, grinding, locker plant, and other services.
⁵ When associations providing miscellaneous services but principally engaged in marketing or farm supply activities are included, the total is 5,495.
⁶ Farm Credit Administration.
⁷ Represents the number of Federal Land Bank borrowers.
⁸ Estimated members of associations borrowing from banks for cooperatives.

⁹ Credit Union National Association, Inc., revised.
¹⁰ Rural Electrification Administration, Department of Agriculture.
¹¹ Includes only associations that are REA borrowers.
¹² Number receiving service.
¹³ Social Security Administration, Department of Health, Education and Welfare. Estimate of number of associations in which farmers have controlling interest.
¹⁴ Farmer Cooperative Service, Department of Agriculture estimates.
¹⁵ Bureau of the Census, 1959 Census of Irrigation.
¹⁶ Dairy Husbandry Research Branch, Department of Agriculture.
¹⁷ Number of cooperative bull studs and herds.

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